POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

LICENSEE:

JALCO AUSTRALIA PTY. LTD.

PREMISES:

JALCO HOUSEHOLD AND FABRIC CARE

277 – 303 WOODPARK ROAD, SMITHFIELD NSW 2164

JALCO AUSTRALIA PTY. LTD. POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

I. BACKGROUND

The Protection of the Environment Legislation Amendment Act 2011 was assented to on 16 November 2011 which the new requirements for the management and notification of pollution incidents by all Environmental Protection Agency (EPA) License holders.

These new requirements involve the occupier of the premises, the employer or any person carrying on the activity on which a pollution incident occurs to *immediately* notify each of the relevant authorities when material harm to the environment is caused or threatened.

II. PURPOSE

The purpose of the plan is to define the actions to be taken to prepare, keep, test and implement a pollution incident response management plan for Jalco Australia Pty. Ltd as defined in the Protection of the Environment Legislation Amendment Act 2011.

This plan provides guidelines for:

- Preparing the Pollution Incident Response Management Plan (PIRMP)
- Keeping the PIRMP at the Premises
- Testing the PIRMP in accordance with the regulations
- Implementing the PRIMP in case of an incident

III. SCOPE

This plan applies only to Jalco Australia Pty Ltd, known as the *Licensee* of EPA License Number 2746. The premises is known as *Jalco Household and Fabric Care* and located at 277 – 303 Woodpark Road Smithfield, NSW 2164.

Other Jalco sites which also hold an EPA license is not included in the scope of this plan.

Jalco sites which do not keep an EPA license are not included in the scope of this plan.

IV. RELATED DOCUMENTATION

JHF-007 Disaster Recovery Procedure
PACT WHSR PRO 006 Incident Reporting and Investigation Procedure

V. FACILITY INFORMATION

A. Jalco Australia Pty. Ltd.

LICENSE NUMBER	2746
LICENSEE	JALCO AUSTRALIA PTY. LIMITED
LICENSE TYPE	PREMISES
PREMISES	JALCO HOUSEHOLD AND FABRIC CARE 277-303 WOODPARK ROAD SMITHFIELD NSW 2164
SCHEDULED ACTIVITY	CHEMICAL PRODUCTION
FEE BASED ACTIVITY	DANGEROUS GOODS PRODUCTION
REGION	METROPOLITAN LEVEL 3, NSW GOVT. OFFICES, 84 CROWN STREET WOLLONGONG NSW 2500 PHONE: 02 4224 4100 FAX: 02 4224 4100 P.O. BOX 513 WOLLONGONG EAST NSW 2520

The Pollution Incident and Control Coordinator is responsible for on-site pollution prevention and control. The Pollution Incident and Control Coordinator is also responsible for reporting immediate notifications of releases to the environment.

Pollution Incident and Control Coordinators:

Harshad Joshi
Working Hours Phone Number: *0417 834 064*
After Hours Phone Number: *0417 834 064*
Dean Fisher
Working Hours Phone Number: *0404 818 730*
After Hours Phone Number: *0404 818 730*

Shalini Singh
Working Hours Phone Number: *02 9757 6315*
After Hours Phone Number: *0404 818 746*
Aj Afualo
Working Hours Phone Number: *0411 266 432*
After Hours Phone Number: *0411 266 432*

3rd Party – Sovelco (Mathew Jones):
Working Hours Phone Number: 02 9833 7035
After Hours Phone Number: 0425 349 621

VI. PREVENTION OF POLLUTION INCIDENTS

Prevention of pollution incidents can be done through the control of human, machine or equipment performance and physical environment. As such, policies and procedures have been established to protect human health and the environment.

To minimize or prevent the probability of pollution incident occurring, annual review of the current pollution controls will be conducted by the Group Quality and Compliance Manager and an appointed site representative/s. The review is carried out to ensure that the information carried out in the plan is accurate and up to date. This assessment shall verify that the plan is capable of being implemented in a workable and effective manner.

An annual testing of the plan in the form of a Mock Pollution Incident shall be conducted by the Group Quality and Compliance Manager and relevant site managers. This is to ensure that in the event of a pollution incident; the site is capable of reporting, managing and communicating the incident to appropriate regulatory authority.

VII. ESTABLISHING POLLUTION INCIDENT MANAGEMENT TEAM

Depending on the type and size of the pollution incident, a Pollution Incident Management Team shall be established to perform and coordinate the management and communication of the incident.

The Pollution Incident Management Team shall be led and coordinated by the site General Manager or Delegate and the Site Emergency Coordinator or Deputy Coordinator.

Additional resources are to be determined based on the type of incident and may include the following:

- Company Directors
- Group Human Resources Manager

- Group Employee and Industrial Relations Manager
- OH&S Committee Chairman and/or Member
- Site Business Unit Manager
- Technical Manager
- Site or Group Engineer
- Quality Assurance Manager
- Maintenance Manager
- Finance Director

VIII. DETAILS OF PRESENT SITE

The Jalco Household and Fabric Care Division of the Jalco Group is located at 277 – 303 Woodpark Road, Smithfield NSW 2170.

SITE: Street No. 277 – 303 Woodpark Road – refer to Site Plan (page 2) of this manual.

Building A on site plan – approximate building floor is 4000 square meters, utilised for manufacturing, production and warehousing of finished goods, raw materials and packaging materials.

Building is of steel column and steel portal frame rood structure. Walls are vertically installed aggregate faced pre-cast concrete, roofing is steel roof sheet clad. The height of the roof structure at the walls of this building is generally 8.0 metres with the rear section of the western bay raised to approximately 11.5 metres to accommodate height of production equipment and silos installed in this area. To the front and attached to this building is a single storey office block of clay brick structure and steel roof cladding. Approximate area of office is 470 square metres.

Both factory and office areas are protected by smoke detector systems. Refer to Section 2.1.0 of this manual.

To the rear of and separated from Building A is an approved flammable goods store building of 150 sq metres floor area. Building is steel framed walls and roof structure with steel sheet cladding to walls and roof. The building is bunded and protected by smoke detectors. Refer Section 2.1.0 this manual.

This total site area is approximate 2.0 hectares with the southern boundary fronting Woodpark road, the area between the front office and street alignment being a landscaped area.

The eastern boundary is separated from the adjoining industrial property by a chain wire security fence. The area between the factory wall and the fence us concrete paved. Both western and eastern yards are security protected by chain wire fence and gates. At the

northern boundary, a chain wire fence and gates. At the northern boundary, a chain wire fence separates this property from the rear fence line of residential properties. Between this fence line and the rear of the factory building is a concrete paved driveway along the building rear wall and a 30.48 meter-wide landscaped buffer zone area to the rear fence alignment.

SITE – Street no. 305/307 – Refer Site Plan page 1.1.3 this section.

Building B on site plan. Approx. Area 3300 sq. metres. Building is a steel portal framed building of clay brick walls and steel roof cladding, with entire roof area insulated with clean skin dust free ceiling construction. Height of building at wall line approx. 8.0 metres. To the front and attached to this building is an elevated office building of clay brick construction on suspended concrete slab with car parking under. Office area – approx. 130 sq. Metres.

Both factory and office areas are protected by fire Sprinkler System. Refer Section 2.1.0 this manual. To the front of this office area is a concrete paved car park area, screened from the street frontage by a 10.0 metre wide landscaped area.

The factory area of this building is utilised for:

I. Manufacturing and Production 1400 sq metres
II. Warehouse 1900 sq metres

Constructed against the eastern wall of this building to the north of the roller shutter door servicing the Consumer goods product warehouse is an open-faced, roofed storage building – refer Site Plan 1.1.3 (this manual). In this building fibre board cartons and plastic bottles are stored to the roof of the structure. No fire protection is provided. Refer 2.1.0 (this manual).

This total site area is approx. 1.0 hectare (2.47 acres) with the northern boundary fronting Woodpark Road.

The western boundary consists of a narrow (approx. 6 metre wide) concrete paved common driveway separating the Jalco building from a similar constructed building occupied by a transport company, the building being utilised for warehousing of goods and truck loading area.

At the northern boundary there is a chain wire security fence separating this property from the rear fence line of a residential area.

IX. DESCRIPTION AND LIKELIHOOD OF HAZARDS

1. Storage of Chemicals

Register is kept and maintained for all Dangerous Goods stored or handled on site. MSDS for each Dangerous Goods and the Site Manifest are stored in the MSDS Box located in front office building.

Dangerous Goods register is maintained and updated by the site annually. There are twenty six (26) Dangerous Goods Depots on site and these are stored in the following locations (Table 1):

Table 1: List of Dangerous Goods

DEPOT	CORRECT SHIPPING NAME	TYPE OF STORE LOCATION	CLASS	BUNDED STORAGE? (Y OR N)
1	ALKYL SULFONIC ACID, LIQUID	Above Ground Tank	8	Y
2	ALKYL SULFONIC ACID, LIQUID	Above Ground Tank	8	Y
3	ALKYL SULFONIC ACID, LIQUID	Above Ground Tank	8	Y
4	EXTRACTS, AROMATIC LIQUIDS 1-METHOXY-2-PROPANOL HAZARDOUS SUBSTANCE, LIQUID N.O.S	Roofed Store	3 3 9	Y
5	HYDROGEN PEROXIDE, AQUEOUS SOLUTION	Roofed Store	5.1	Y
6	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Roofed Store	9	Y
7	HYPOCHLORITE SOLUTION	Above Ground Tank	8	Y
8	HYPOCHLORITE SOLUTION	Above Ground Tank	8	Y
9	PETROLEUM GASES, LIQUEFIED	Above Ground Tank	2.1	N
10	FLAMMABLE LIQUID N.O.S	Above Ground Tank	3	Y
11	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Roofed Store	9	Y
12	ALKYL SULFONIC ACID LIQUID	Above Ground Tank	8	Y
13	CORROSIVE LIQUID N.O.S	Above Ground	8	Y

DEPOT	CORRECT SHIPPING NAME	TYPE OF STORE LOCATION	CLASS	BUNDED STORAGE? (Y OR N)
		Tank		
14	CORROSIVE LIQUID, NOS	Above Ground Tank	9	Y
16	HYDROCHLORIC ACID	Above Ground Tank	8	Y
17	Sodium Hydroxide Solution	Above Ground Tank	8	Y
18 ACID	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	Process Dispersing	8	Y
18 ALKALI	CAUSTIC ALKALI LIQUID, N.O.S.	Process Dispersing	8	Y
19	Alkyl Sulfonic Acid Liquid Environmentally Hazardous Substance, Liquid, N.O.S	Roofed Store Tank Farm	8	Y
20	Nitrogen, Compressed	Cylinders in Use	2.2	N
21	Sulphuric Acid	Mobile Bund Store	8	Y
22A	Hydrochloric Acid	Mobile Bund Store	8	Y
22B	Hydrogen Peroxide Aqueous Solution	Mobile Bund Store	8	Y
23	Naphthalene, Crude	Roofed Store	4.1	Y
24	Sodium Carbonate Peroxyhydrate	Roofed Store	5.1	Y
25	Environmentally Hazardous Substance, Liquid N.O.S	Above Ground Tank	8	Y
26	Alkyl Sulfonic Acid, Liquid	Above Ground Tank	8	Y
27	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	Roofed Store	8	Y
28	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	Roofed Store	8	Y
29	TRICHLOROISOCYANURIC ACID, DRY	Roofed Store	5.1	N
30	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS C12-C15 ALCOHOL ETHOXYLATED)	Above Ground Tank	8	Y

All except for one depot (Depot 23) are located on the western side of the property. This entire area where the depots are located is called the “dirty zone” where in the event of chemical spill; the chemical is directed towards the Quarantined Storm Water Depot. Relevant testing is conducted on the collected chemical before this is directed to the

Dissolved Air Flotation (DAF) Plant. This is to ensure that the biological and chemical balance in the DAF Plant is not adversely affected by the introduction of chemicals.

All surface water or chemical run-off from delivery trucks in this zone is also directed to the Quarantined Storm Water Depot. This depot has the provision to divert collected surface and/or rain water to storm drain only when resulting water quality is acceptable.

2. Storage of Solid Waste

Sources of the site's solid wastes are empty raw material containers (drums, pails, etc), plastic and kraft bags, packaging cardboards, and damaged packaging materials from production.

Shippers and cardboard liners used for packaging materials are collected and returned to the suppliers.

Solid wastes from manufacturing and production are collected daily by Veolia Environmental Services P/L.

3. Storage of Waste Water and Other Liquid Wastes

The Dissolved Air Flotation (DAF) Plant is protected by bund to contain leaks, spills or overflows. DAF sludge is removed as per the site's requirements by Solveco P/L and Cleanway Environmental Services P/L.

Rejected liquid bulk products are collected and disposed of accordingly by the above-mentioned licensed trade waste collectors.

4. Potential Failure of Containment Tanks

All containment tanks used for the storage of dangerous goods are located on the western side of the factory. This area has a catchment for chemical run-off or surface water and diverts the collected influent to the Quarantined Storm Water Depot. This area is also where bulk and packed raw materials delivery are accepted and stored in the allocated depot. In addition to the catchment in this area, a number of these depots have been enclosed in a concrete bund to contain spill should this occur.

There are two (2) Soda Ash Silos located in the western boundary. These silos have been fitted with baghouse on top. The baghouse is inspected and serviced by Enviro Technologies every 3 months. Parts are replaced as required. Pressure differential checked and evidence of powder on air outlet reviewed to establish need for replacement as per service schedule.

5. Uncontrolled Release of Air Pollutants

There are eight (8) sources of air pollutants in Smithfield. Table 2 is the description of air pollutants and corresponding control technology in place. Table 3 is the monitoring frequency of the control technology by the service provider whilst Table 4 is the Preventive Maintenance Program of the listed control technology.

Table 2: Description of Air Pollution Source:

No.	Description	Control Technology	Reduction Efficiency (%)	Date First Commissioned
1	Boiler – Package Steam Boiler	Combustion Analysis Annually	80%	Jul-00
2	Powders Manufacturing – Baghouse Outlet	Dust Extraction Cyclones & Baghouse	99%	Jul-85
3	QC Fume Cupboard	Wet Scrubber in Fume Cupboard	98%	Jan-01
4	Liquids Manufacturing Wet Scrubber	Wet Scrubber	95%	Jan-00
5	Liquids Filling Wet Scrubber	Wet Scrubber	95%	Jan-00
6	Silo Baghouse 1	Baghouse	95%	Jul-85
7	Silo Baghouse 2	Baghouse	95%	Jul-85

Table 3: Monitoring Frequencies

		Control Technology		
No	**Description**		**Monitoring Frequency**	**By Whom**
1	Boiler – Package Steam Boiler	Combustion Analysis Annually	2-3 monthly Inspection & Service Annual Inspection & Service	RCR Energy Service
2	Powders Manufacturing – Bag House Outlet	Dust extraction cyclones & Bag House	3 monthly inspection & Service	Enviro Technologies Pty Ltd Ph: 0499 717 181
3	Research & Development Fume Cupboard	Wet Scrubber in Fume Cupboard	Annual Inspection & Service	Dynamic Fume Exhaust Systems Ph: 9757 6393
4	Liquids Manufacturing Wet Scrubber	Wet Scrubber	Annual Inspection & Service	Dynamic Fume Exhaust Systems Ph: 9757 6393
5	QC Fume Cupboard	Wet Scrubber in Fume Cupboard	Annual Inspection & Service	Dynamic Fume Exhaust Systems Ph: 9757 6393
6	Liquids Filling Wet Scrubber	Wet Scrubber	Annual Inspection & Service	Dynamic Fume Exhaust Systems Ph: 9757 6393
7	Silo Bag house 1	Bag house	3 monthly inspection & Service	Enviro Technologies Pty Ltd Ph: 0499 717 181
8	Silo Bag house 2	Bag house	3 monthly inspection & Service	Enviro Technologies Pty Ltd Ph: 0499 717 181

Table 4: Preventative Maintenance Program

No	Description	Control Technology	Preventative Maintenance Program
1	Boiler – Package Steam Boiler	Combustion Analysis Annually	Monthly inspection & service by RCR Energy Service as per Australian Standards for unattended boilers.
2	Powders Manufacturing – Bag House Outlet	Dust extraction cyclones & Bag House	Inspection & Service by Enviro Technologies Pty Ltd. Parts replaced as required. Pressure differential checked and evidence of powder on air outlet reviewed to establish need for replacement As per service schedule
3	QC Fume Cupboard	Wet Scrubber in Fume Cupboard	Inspection and Service by Dynamic Fume Exhaust Systems on annual basis
4	Liquids Manufacturing Wet Scrubber	Wet Scrubber	Inspection and Service by Dynamic Fume Exhaust Systems on annual basis
5	Liquids Filling Wet Scrubber	Wet Scrubber	Inspection and Service by Dynamic Fume Exhaust Systems on annual basis
6	Silo Bag house 1	Bag house	Inspection & Service by Enviro Technologies Pty Ltd. Parts replaced as required. Pressure differential checked and evidence of powder on air outlet reviewed to establish need for replacement
7	Silo Bag house 2	Bag house	Inspection & Service by Enviro Technologies Pty Ltd. Parts replaced as required. Pressure differential checked and evidence of powder on air outlet reviewed to establish need for replacement

6. Potential Failure of Storm Water Drainage System

Diagram 1 Stormwater Drainage System of the site shows road drainage systems, sumps, roof water collection, drainage system and discharge outlets into the off-site drainage system. The storm water lines on site and connection to offsite drainage are shown in purple. As shown in Diagram 1, there are two drainage systems. One services the warehouse building located on the eastern side of the site whilst the other drainage service is on the western side where the manufacturing building and associated roadways are situated. Both systems have independent connection to the offsite drainage system.

Details of Diagram 1 show the “clean” and “dirty” areas of the site. Furthermore, Diagram 1 illustrates the trade waste system and controls to prevent surcharges, leaks and/or overflows from this system to prevent discharges to storm water. Details of these controls are as follow:

Stormwater enters the site's external storm water drainage system via a number of grated underground inspection pits located throughout the site. Water is then held within the sites underground pipe-work and retained within the pipes until such time it is released

by opening one or both gate valve. Opening the gate valve releases water into the council storm water drain. Water levels must at all time remain below the main pit level so as not to allow the pit to overflow and therefore allow site runoff water to by-pass the sites drainage system and run directly into the council drains.

i. A restrictor valve is fitted inline in the main discharge from the trade waste treatment plant to the sewer connection point. This prevents excessive flow into the sewer and prevents the overflows of this discharge.

ii. Where there is an overflow from the Trade Water Plant, this is transferred by an automatically activated by level sensing submersible pump to the Varisoft Bund with an estimated holding capacity of 60kL. This prevents any possible overflow of trade waste from the trade waste bund.

iii. Discharge from the trade waste treatment plant to the sewer connection is only undertaken during working hours when the plant is operating. This transfer is conducted by trained operators only.

iv. The bund around the trade water plant area has a capacity of approximately 45kL. This is greater than the capacity of either of the tanks (1 x ~40 kL, 1 x ~20kL) and can be used to contain any discharge from either of the tanks in the event there is malfunction of the automatic transfer pump.

v. Site procedures state that the gate to the storm water connection to offsite is closed during normal operation of the site. This gate is only opened in the event of heavy rain and where testing of the quality of water to be discharged has been completed and approved for release from the site.

vi. Diagram 2 shows the layout of the trade waste plant.

vii. The warehouse area (eastern side of the site) is designated as "clean" area. Stormwater will continually be discharged using the current separate system and discharge point.

viii. The manufacturing area (western side of the site) is divided into two distinct area and these are designated as clean and dirty areas.

- The clean area starts from the LPG tank at the rear of the site east and along the driveway between the manufacturing area and warehouse to the street. Stormwater collected from this area will be diverted past the current containment system direct to the offsite drainage. This is facilitated using the installed pipe work in front of the containment system and into the pipe on the offsite side of the containment valve. An additional isolation valve is installed within this pipe work that can be closed in the unlikely event of a significant spill within the clean area.

- The dirty area is from the LPG tank west and along the driveway between the manufacturing area and the adjoining property on the western side of the site. The existing procedures for containment and treatment of storm water are maintained in this area.

7. Potential Failure to Meet Noise Limits

Noise from the premises must not exceed:

A. An LA10 (15 minute) noise emission criterion of 70dB(A) from 0700H to 2200H seven days a week

and

B. An LA10 (15 minute) noise emission criterion of 65dB(A) at all times, except as expressly provided by the EPA licence.

Noise from the premises is to be measured or computed at any point within one metre of the premises boundary to determine compliance with condition set at **A**. 5dB(A) must be added if the noise is tonal or impulsive in character.

There is no current requirement set by EPA as to the frequency to conduct noise monitoring. Noise monitoring shall be conducted when there is a warrant to have it done such as valid noise complaint from surrounding neighbours.

C. RISK ASSESSMENT PROCESS

This risk matrix is based on Jalco Group's Risk Management Guidelines Document Number RMP-03-03 issued on 27/10/12.

Consequence of Risk

Level	Description	Example details description
1	Insignificant	No injuries, low financial loses
2	Minor	First aid treatment, on-site release contained, medium financial loss
3	Moderate	Medical treatment required, on-site release contained with out side assistance
4	Major	Extensive injuries, loss of production capability, off-site release with no detrimental effect, major financial loss.
5	Catastrophic	Death, toxic release off-site with detrimental effect, huge financial loss

Table 2: Likelihood of Risk

Level	Description	Example details description
A	Almost certain	Is expected to occur in most circumstances
B	Likely	Will probably occur in most circumstances
C	Possible	Might occur at some times
D	Unlikely	Could occur at some times
E	Rare	May occur only in exceptional

Table 3: Risk Analysis Matrix – (Level of Risk)

Likelihood	Consequence				
	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
A (almost certain)	H	H	E	E	E
B (likely)	M	H	H	E	E
C (possible)	L	M	H	E	E
D (unlikely)	L	L	M	H	E
E (rare)	L	L	M	H	H

Table 4: Action Required

E: Extreme risk (Senior Management action required) Isolate immediately and Rectify within 2 weeks	Significant
H: High risk (Senior management action required) Isolate immediately and rectify within 2 weeks	Significant
M: Moderate risk (Management responsibility must be specified) Rectify within a reasonable time frame. An action plan is required for any risks which will not be rectified within 4 weeks which indicates how the risk will be managed and rectified	Not Significant
L: Low risk; (manage by routine procedure)	Not Significant

Table 5: Risk Rating of Site Hazards

Identified Hazard	Likelihood	Consequence	Level of Risk	Associated Risk/s	Details of Conditions That Could/Would Increase Likelihood of Hazard	Pre-emptive Actions Required or In Place
Storage of Chemicals	Unlikely	Moderate	Moderate Risk	Toxic Effects of Chemicals to Human Health Flammability of Chemicals Corrosive Effects of Chemicals	Chemical spill during receipting or transfer of chemicals Flammable chemicals not stored in the designated flammable depot Corrosive chemicals not stored in the designated corrosive depot	Procedures on the receipting and decanting of chemicals are in place. In case of spill, refer to MSDS for the appropriate handling. Dangerous goods are kept at the designated depot. Incoming Goods Receiver checks delivery invoice and identify which depot the goods will be stored.
Storage of Solid Waste	Rare	Insignificant	Low Risk	Disposal of Waste Congested work and storage areas	Failure to collect waste based on agreed frequency with the licensed waste collected	Solid wastes from manufacturing and production are collected daily as per agreement with the licensed waste collector.
Storage of Waste Water and other Liquid Waste	Possible	Minor	Moderate Risk	Disposal of Waste Possible breach to Sydney Water Agreement	Failure to collect waste based on agreed frequency with the licensed waste collected	Sludge and other liquid wastes are collected as per agreement with the licensed waste collector. In the event of overflow from the trade

Identified Hazard	Likelihood	Consequence	Level of Risk	Associated Risk/s	Details of Conditions That Could/Would Increase Likelihood of Hazard	Pre-emptive Actions Required or In Place
					Too much surfactants, and any other substances that disrupt chemical and biological balance in the DAF plant	waste treatment plant, the liquid waste is transferred by an automatically activated level submersible pump to the Varisoft bund which has an estimated holding capacity of 60kL. This prevents any possible overflow of trade waste from the trade waste bund. Expansion of the DAF plant is proposed as part of the Pollution Reduction Program (PRP) by the business. Levels of surfactants have tripled over the past years due to Concentrated Laundry Products.
Potential Failure of Containment Tanks	Unlikely	Minor	Low Risk	Toxic Effects of Chemicals to Human Health Release of chemicals to DAF Plant	Uncontrolled spill or leaking containment tanks	All containment tanks are located in the western side of the site which Liquid dangerous goods depot have been bunded to further contain chemicals in case of spill or leaks.
Uncontrolled Release of Air Pollutants	Unlikely	Minor	Low Risk	Toxic Effects of Air Pollutants to Human Health Release of potentially	Failure of currently installed control technology	Control Technology for each air emission locations in the site is serviced at a prescribed frequency by the providers. Any parts are replaced

Identified Hazard	Likelihood	Consequence	Level of Risk	Associated Risk/s	Details of Conditions That Could/Would Increase Likelihood of Hazard	Pre-emptive Actions Required or In Place
				harmful environmental substances in air		on a per need basis determined by the service providers.
Potential Failure of Stormwater Drainage	Unlikely	Minor	Low Risk	Release of potentially harmful environmental substances to storm water	Failure of discharge valve from trade water treatment to sewer connection point Failure to test quality of water to be discharged.	Discharge of treated trade waste to storm water is done by a trained operator and only when required trade waste water parameters are met. Site procedure is in place for the discharge of site storm water to council drainage.
Failure to Meet Noise Limits	Unlikely	Minor	Low Risk	Noise exceeding set out in the site's EPA License	Worn out rotary valves of Powders Plant Blow down of Compressor	Preventive Maintenance of Rotary Valves Reporting System where Operators are to call attention of Fitters for unusual noise in the powders plant Blow down is done between 0700H to 2200H and is less than 15 minutes to complete.

D. Inventory of Potential Pollutants on Site Table 6 is the inventory of potential pollutants on site and the maximum quantity stored on site.

Table 6: Inventory of Potential Pollutants

Potential Pollutant	Product or Common Name	Class	Division	Maximum Quantity	Unit
PETROLEUM GASES, LIQUIFIED	LPG	2.1	FLAMMABLE GASES	4,000 L	L
NITROGEN, COMPRESSED	NITROGEN GAS	2.2	NON-FLAMMABLE, NON-TOXIC GASES	109 m^3	m^3
ISOPROPANOL	ISOPROPANOL	3	FLAMMABLE LIQUIDS	30,000 KG	KG
FLAMMABLE LIQUID, N.O.S	ERUSOFT	3	FLAMMABLE LIQUIDS	30,000 KG	KG
EXTRACT, AROMATIC LIQUIDS	PERFUME	3	FLAMMABLE LIQUIDS	30,000 KG	KG
1-METHOXY-2-PROPANOL	METHOXY PROPAMOL	3	FLAMMABLE LIQUIDS	30,000 KG	KG
ETHANOL	ETHYL ALCOHOL	3	FLAMMABLE LIQUIDS	30,000 KG	KG
FLAMMABLE LIQUID, N.O.S.	FABRIC SOFTENER BASE	3	FLAMMABLE LIQUIDS	80,000 L	L
NAPHTHALENE, CRUDE	MOSOM NAPHTHALENE FLAKES	4.1	FLAMMABLE SOLIDS	8,000 KG	KG
HYDROGEN PEROXIDE AQUEOUS SOLUTION	HYDROGEN PEROXIDE 50%	5.1	OXIDISING SUBSTANCES	1,000 L	L
OXIDISING SOLID, N.O.S.	SODIUM PERCARBONATE	5.1	OXIDISING SUBSTANCES	15,000 KG	KG
ALKYL SULFONIC ACID, LIQUID	GARDILENE SSAS	8	CORROSIVE SUBSTANCES	178,500 L	L
PHOSPHORIC ACID	PHOSPHORIC ACID	8	CORROSIVE SUBSTANCES	2,000 L	L
HYDROCHLORIC ACID	HYDROCHLORIC ACID	8	CORROSIVE SUBSTANCES	13,000 L	L
CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	ACTICIDE RS	8	CORROSIVE SUBSTANCES	300 L	L

Potential Pollutant	Product or Common Name	Class	Division	Maximum Quantity	Unit
HYPOCHLORITE SOLUTION	SODIUM HYPOCHLORITE SOLUTION	8	CORROSIVE SUBSTANCES	30,000 L	L
SODIUM HYDROXIDE SOLUTION	CAUSTIC SODA 50%	8	CORROSIVE SUBSTANCES	12,000 L	L
CORROSIVE LIQUID, N.O.S.	VARIOUS	8	CORROSIVE SUBSTANCES	,000 L	L
ALKYSULPHONIC ACIDS, LIQUIDS	LABSA – GARDILENE SSAS	8	CORROSIVE SUBSTANCES	39,000 L	L
FLAMMABLE LIQUID, N.O. S	FABRIC SOFTENER BASE	4.1	CORROSIVE SUBSTANCES	30,000 L	L
AMMONIA SOLUTION	AMMONIA 25%	8	CORROSIVE SUBSTANCES	1,000 L	L
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S.	VARIOUS	9	MISCELLANEOUS DANGEROUS SUBSTANCES AND ARTICLES	60,000 L	L
TRADE WASTE WATER IN DAF	N/A	N/A	N/A	45 kL	kL
SOLID WASTE FROM MANUFACTURING AND PRODUCTION	N/A	N/A	N/A	25 MT	MT
SLUDGE AND OTHER LIQUID WASTE	SLUDGE WASTE LIQUID SURFACTANTS	N/A	N/A	40 MT	MT
LAUNDRY POWDER DUSTS FROM MANUFACTURING (BAG HOUSE OUTLET)	LAUNDRY POWDER DUSTS	N/A	N/A	20 MT	MT
SODA ASH DUSTS FROM SILOS 1 AND 2	SODA ASH DUSTS	N/A	N/A	2 MT	MT
EMISSIONS FROM BOILER (PACKAGE STEAM BOILER TYPE)	EMISSIONS FROM BOILER	N/A	N/A		
LABORATORY FUME CUPBOARD EMISSION	N/A	N/A	N/A	N/A	N/A

Potential Pollutant	Product or Common Name	Class	Division	Maximum Quantity	Unit
LIQUIDS MANUFACTURING WET SCRUBBER EMISSION LIQUIDS FILLING WET SCRUBBER EMISSION	N/A	N/A	N/A	N/A	N/A

E. DESCRIPTION OF SAFETY EQUIPMENT TO MINIMISE RISKS TO HUMAN HEALTH OR ENVIRONMENT

Table 7: Description of Safety Equipment

Identified Hazard	Description of Safety Equipment
Storage of Chemicals	All dangerous goods are stored in the designated depots as illustrated on Dangerous Goods Depot Plan (Drawing 1). Except for Depots 9 (LPG Depot), Depot 18 (Aerosols) Depot 23 (Naphthalene) all other Depots have been built on bunds to contain spills or leaks from the containment tanks. Except for Depots 9 and 18, all existing depots are located on the western side of the site. This side of the property is deemed the “dirty “side due to the location of the depots and raw materials delivery and receiving occur on this area as well. Any runoff on this area – be it chemicals or water will be diverted to the trade waste plant for treatment. Chemicals are received and/or decanted based on the current procedures in place. In case of chemical leak, the site has a Self-Containing Breathing Apparatus (SCBA). A number of employees and members the safety team have been trained to use SCBA.
Storage of Solid Waste	Solid wastes are stored in skip bins provided by the licensed waste collector and are collected daily.
Storage of Waste Water and other Liquid Waste	Waste water from manufacturing is diverted to the DAF plant for treatment. As required by regulatory bodies, waste water is treated to meet the trade waste parameters before it is released to public storm water drain. Composite and Discrete Samples are collected at a prescribed frequency by Sydney Water and tested by a NATA certified third party laboratory (ALS Laboratory). Sludge and other liquid wastes like rejected bulk (work-in-progress) are collected by licensed sludge collectors. These wastes are collected upon the site’s request (at least twice a month).

Identified Hazard	Description of Safety Equipment
Potential Failure of Containment Tanks	Containment bunds
Potential Failure of Stormwater Drainage	There are two storm water discharge systems on site. The Storm Water Gate 1 located at the Main Gate and Storm Water Gate 2 warehouse area located on the eastern side of the property, both are deemed as the clean side. Storm water collected from this side of the site is diverted to Storm Water Control Pit.
Potential Failure to Meet Noise Limits	There is no current requirement set by EPA as to the frequency to conduct noise monitoring. Noise monitoring shall be conducted when there is a warrant to have it done such as valid noise complaint from surrounding neighbours.

F. External Contact Phone Number Listing:

Jalco Australia

EPA	131 555
NSW Ministry of Health	Business Hours Ph: 02 9515 9420 Fax: 02 9515 9440 Fax: 02 9515 9467 (s) After hours Ph: 02 9515 6111 (Royal Prince Alfred Hospital) - ask Public Health Officer on call
Fire and Rescue NSW	000 - Emergency
WorkCover NSW	13 10 50
Holroyd City Council	Phone: (02) 9840 9840 (Business Hours) Fax: (02) 9840 9734
NSW Police	000 – Emergency
Quality Assurance Manager	02 97576315, Mobile 0404 818 746

G. Incident Management Procedure for Communicating with the Community

A. Definitions of Pollution Incident and Material Harm Incident

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

A material harm incident is defined as an incident that is considered to be causing or threatening material harm which involves actual or potential harm to the health and safety of people or to ecosystems as well as results on actual or potential loss or property damage. The determination of a material harm incident will be made by either the General Operations Manager (relevant on duty authority).

B. Notification of Adjacent Companies and Neighbours

In the case of a material harm incident, prior to any other action, the initial observer must report the issue immediately to the General Operations Manager (relevant on duty authority) and the site must contact 000 if the incident presents an immediate threat to human health or property. Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents. Simultaneously all evacuation procedures should be implemented for all guests and non-essential staff. However, incident notification will be made as soon as it is safe to do so.

After the initial response to any events that may cause immediate harm to human health or property the General Operations Manager (relevant duty authority) will determine if the event constitutes an “actual or potential material harm incident”. In the event of a “material harm incident” the following authorities need to be contacted as per Section XIII External Contact Phone Number Listing:

- EPA
- Holroyd City Council
- NSW Ministry of Health
- Work Cover NSW
- NSW Fire and Rescue
- Sydney Water

In the case of a “material harm incident” the following information must be noted and forwarded to the authorities when they are notified of the incident:

- Time and date.
- Nature and location of the incident.
- Duration of the incident.
- Location of areas that may be affected by the pollution incident.
- Pollutant involved and the estimated quantity/volume and concentration
- Circumstances in which the incident occurred.

- The proposed action to be taken in dealing with the pollutant and any further incidents that may result.

A detailed record should be kept of all steps involved in dealing with each incident and kept on site in case additional information is required. After the initial notification of a material harm incident, it will be the responsibility of the Pollution Incident and Control Coordinators to coordinate with any authority that is contacted.

If the material harm incident does not pose any threat to human health or property, concurrently with contacting emergency services (000), all possible actions should be taken to control the pollution incident and minimize health, safety and environmental consequences. These actions must be employed to the maximum extent possible to:

- Provide for the safety of people at and within the vicinity of the site; and
- Contain the pollution incident.

C. Notification of Adjacent Companies and Neighbours

In the event of a determined material harm incident, community notification will be undertaken by the Pollution Incident and Control Coordinators.

When contacting adjacent companies and neighbours the following notification process is to be used:

1. **Warnings**: in the event of an incident same day face to face contact and telephone notification will be employed to update affected landholders
2. **Updates**: follow-up telephone calls will be made to all landholders who were notified in the initial warning. Updated information will be provided if and when it becomes available and necessary to be passed on. Updates will be provided to the community as follows:

    1. Face to face contact or telephone call
    2. Letterbox drops
    3. Publication of updates on Jalco's Website
    4. Emailing of updates
    5. Door-knocking

H. Testing of the Plan

The PIRMP will be tested on an annual basis during the life of the EPA licence. Testing will be by way of desktop simulations and/or practical exercises and drills undertaken at the Smithfield site. The PIRMP will also be tested within one month of any pollution incident occurring. Records of testing will be kept on site.

I. Review of PIRMP

The PIRMP will be reviewed every 3 years. The plan will be updated as required based on the current state of the site. Records of PIRMP revisions will be recorded.

J. Staff Training

The objective of staff training is as follow:

- **Individuals** – understand pollution incident procedures, their roles, responsibilities and how to activate these in a pollution incident situation.

JALCO AUSTRALIA PTY. LTD. POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

DOCUMENT CHANGE CONTROL PAGE

Doc Section No.	Section Title / Subtitle	Changes Made * (See below)	Changes Made / Reason for Changes	Date	Author of Changes
All	All	N	New document	30/06/12	M. Matienzo
9.6 9 9 H. I. J.	Potential Failure to Meet Noise Limits Table 5 Risk Rating of Site Hazards Table 7 Description of Safety Equipment Testing of Plan Review of Plan Staff Training	A A A A A A	Added requirements as set in the EPA Licence Added Potential Failure to Meet Noise Limits Added Potential Failure to Meet Noise Limits Added Testing and Review of Plan and Staff Training	23/12/13	M. Matienzo
G. V.	Incident Management Procedure for Communicating with the Community Pollution Incident and Control Coordinator	A A	Additional information included on the notification and early warnings for premises/persons in the vicinity has been updated to meet the requirements of the regulation. Updated to current emergency contact list.	22/12/14	J. Corns
V IX	Pollution Incident and Control Coordinator Description and Likelihood of Hazards	D/A D/A	Updated to current emergency contact list Updated to current list of dangerous goods list. Table 3 and 4 updated with current service providers.	06/11/2017	S. Singh
V IX	Pollution Incident and Control Coordinator Description and Likelihood of Hazards	D/A D/A	Updated to current emergency contact list Updated to current list of dangerous goods list. Table 3 and 4 updated with current service providers.	21/10/2018	S. Singh

* = LEGEND

A = Additional Information D = Deletion of Information R = Rewording O = Other N = New

Multi-Agency Teams - response teams have detailed understanding of their roles, how to support each other, mobilise, work together to resolve the pollution incident.

Records of staff training will be maintained on site.