

Pollution Incident Reponse Management Plan

FOR: UNIVERSAL ANODISERS

Universal Anodisers' Emergency response Plan sets out how the company acts in the event of an emergency.

It includes how to respond in the event of any incident that occurs on site which may impact offsite.

The plan is shared with regulators and emergency services and is updated whenever new information becomes available.

Emergency services include Fire and Rescue NSW, NSW Ambulance Service, NSW Police

What kinds of incidents could occur at Universal Anodisers that could initiate the emergency response plan?

- Rupture of a bulk storage vessel containing acid or caustic
- Damage to a bulk tanker delivering acid or caustic
- Electrical or vehicle fire
- Natural disasters (earthquake)
- Security threat

How does Universal decide what is an "emergency"

Trained personnel on site assess the situation and consider whether the incident is an emergency.

Factors will include:

- Are people present in the area?
- Can their health be affected?
- Is the "incident" contained on site?
- Can environmental damage occur?
- Can the "incident" escalate
- Can neighbours be affected?
- Are emergency services required to control the incident?

Priorities for action include:

- Rescuing people in immediate danger
- Protecting people on and offsite
- Protecting the environment
- Notifying relevant authorities.

<p>Local Emergency</p> <ul style="list-style-type: none"> • Contained to a limited area of the site • Does not impact the rest of the site or offsite • Response managed by trained site personnel <p>Examples: medical emergency, localized leak, small fire, equipment or structural failure, unstable plant operation</p>	<p>On Site Emergency</p> <ul style="list-style-type: none"> • Potential to affect all site personnel • Will require assistance from all site resources • Does not impact offsite. <p>Examples: electrical fire inside factory or offices, corrosive liquid leak in factory or loading bay with or without toxic fumes.</p> <p>A siren will sound within the factory to alert personnel and may be followed with an instruction to leave the building following the established evacuation procedure.</p>
<p>Off Site Emergency</p> <p>It is highly unlikely that an offsite incident will become an on site emergency.</p> <ul style="list-style-type: none"> • Emergency services will be notified • Site emergency response management will be activated and personnel may assist until emergency services arrive 	<p>Emergency with Potential Off Site impacts</p> <p>In the event of a bulk tanker accidentally discharging acids or caustic solutions in an uncontained area of our site this could run off to storm water drains.</p> <ul style="list-style-type: none"> • Trained site personnel will try to contain any such spill to the site • Site personnel will also assist emergency services with technical advice or as requested.

EMERGENCY CONTACTS

INTERNAL CONTACTS

1) Director	Tony Case	0417 284 761
2) Operations Manager	Luis Da Silva	0407 222 237
3) Factory Shift Supervisor	Day / Afternoon Supervisor	0431 998 207

EXTERNAL CONTACTS (those in bold type must be contacted)

- **Fire and Rescue - Emergency Services (Fire, Ambulance, Police):** 000.
Nearest Cross Street is: Coates Place

OTHER CONTACTS

- **Environmental Protection Agency** 13 15 55
- **Work Cover N.S.W.** 13 10 50
- **Fairfield City Council:** 9725 0222
- **NSW Department of Health (hotline)** 9391 9101
- **Sydney Water Emergency:** 13 20 90
- **Poisons Information Centre:** 13 11 26
- **Fairfield Hospital:** 9616 8111

NEIGHBOURING PREMISES

- **Don Watson** Jeff or Wayne 02 8787 9191
- **SUEZ Environment** 13 13 35
- **DHLTrucks** Sash 0417 248 775
- **Chep Pallets** 02 9757 0111
- **Silverband Logistics** 02 9756 6145
- **Turkmany** Nasair 0418 168 127
- **Reiter Tooling** 02 9604 3364

Location Details

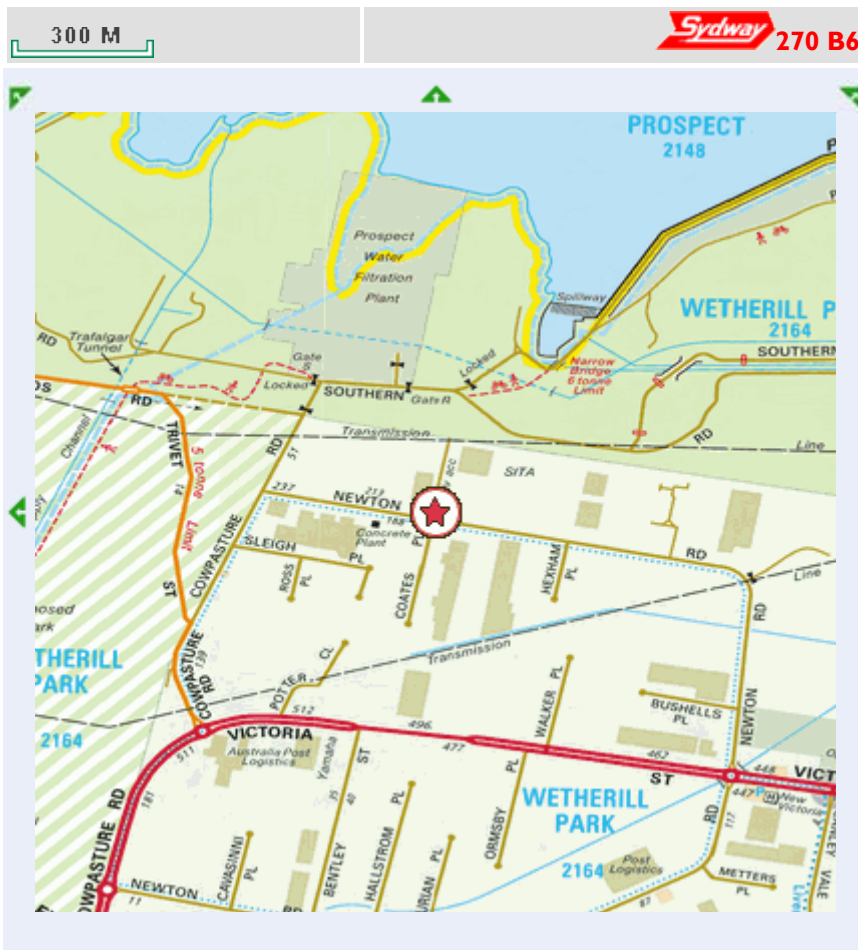
Universal Anodisers
207 Newton Road, Wetherill Park NSW 2164



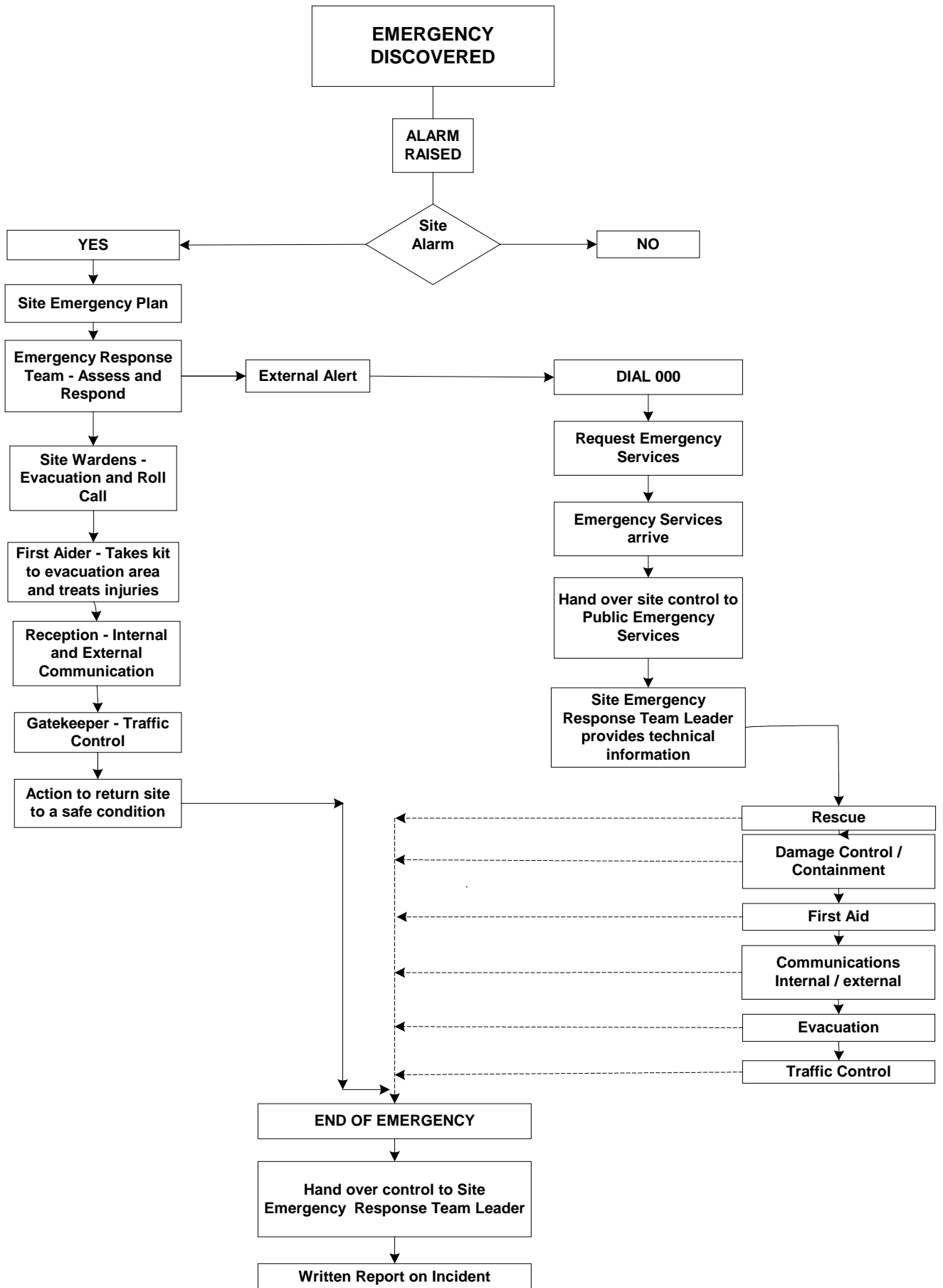
Location Map

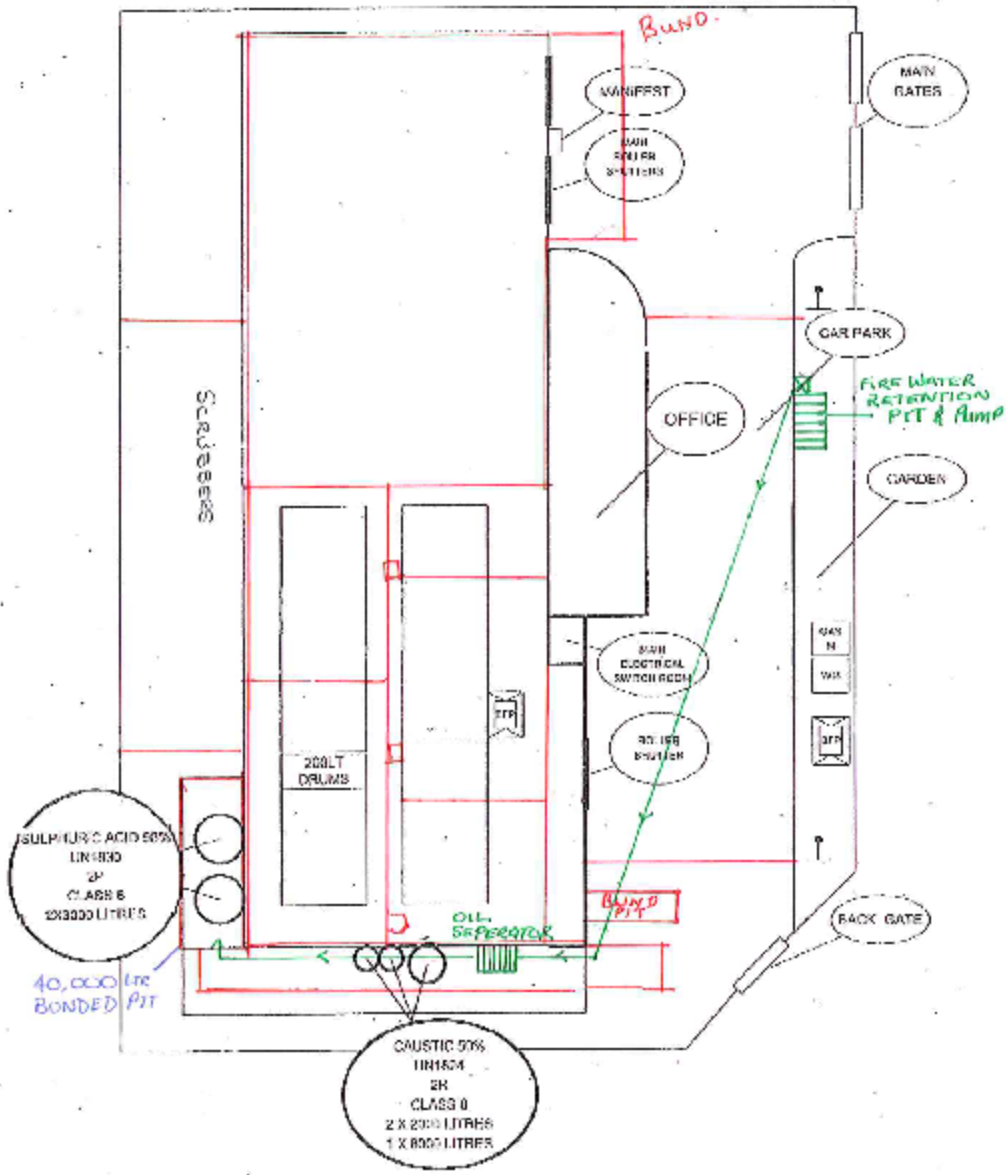
Nearest cross street: Coates Place

[website](#)



EMERGENCY ORGANISATION FLOWCHART





WHAT KIND OF EMERGENCIES COULD OCCUR AT UNIVERSAL ANODISERS?

RISK ASSESSMENT Risk Table

The design and construction of this facility followed extensive consultation and consideration of risks associated with its operation as an anodizing plant. It is purpose built incorporating safeguards that are “best practice”.

This table has been developed to consider operation of the plant and a range of possible initiating events that may create an emergency situation. The possible consequences of events are described and available safeguards and comments are listed.

The most significant risk is chemical spillage with a possible release of acid or alkali fumes.

Fire with or without explosion is possible but extremely unlikely during normal operation.

An earthquake or terrorist attack could render designed safety systems inoperable but is considered to be highly unlikely.

The Table is set out on the following four pages.

Chemical Spills

Possible Initiating Events	Facility of Operation	Possible Consequences	Available Safeguards and Comments
<ul style="list-style-type: none"> Loss of containment of liquid due to tank/valve failure/leak from processing tanks or regeneration plant 	<ul style="list-style-type: none"> Processing Tanks/Pits and Regeneration Plant 	<ul style="list-style-type: none"> Release of chemicals to environment via storm water drainage. 	<ul style="list-style-type: none"> All tanks and regeneration plant are in bunded areas which have bund capacities exceeding the total capacity of any single tank. Most solutions are quite dilute and would not pose a significant threat to the environment
<ul style="list-style-type: none"> Loss of containment of liquid due to pump/valve/tank failure or leak or tank overfilling during transfer of liquids: - Between tanks - Between tanks and regeneration plant - From packages to tanks - From bulk liquid tanks to tanks - Between tanks and water treatment plant. - 	<ul style="list-style-type: none"> Bunded Awning Area - Bulk liquids - Storage area - 	Consequences as above	<ul style="list-style-type: none"> Safeguards as above Only small quantities transferred from packages which only contain 20-200 litres.
<ul style="list-style-type: none"> Loss of containment of bulk liquids due to tank/valve failure/leak or overfilling of tanks, driveway error. 	<ul style="list-style-type: none"> Bunded Awning Area - Bulk liquids - Storage area 	<ul style="list-style-type: none"> Release of chemicals to environment via storm water drainage. 	<ul style="list-style-type: none"> All un/loading to take place under bunded awning area (although a driveway incident could result in a spill outside of the bund) which has capacity that exceeds the tanker capacity. Bulk tank bund capacities exceed the total capacity of a single tank Mostly experienced tanker drivers Low delivery rate Delivered quantity is to be less than the tank capacity making overfilling less likely.

Possible Initiating Events	Facility of Operation	Possible Consequences	Available Safeguards and Comments
<ul style="list-style-type: none"> Collision between tankers/trucks. 	<ul style="list-style-type: none"> Bunded Awning Area - Bulk liquids - Storage area 	<ul style="list-style-type: none"> Tanker/valve failure leading to loss of containment of liquid. Consequences as for loss of containment 	<ul style="list-style-type: none"> Tankers/trucks moving at low velocity and in small numbers makes collision risk less likely than lower than on road. Tankers are located in bunded awning area which has a bund capacity which exceeds the capacity of the tanker.
<ul style="list-style-type: none"> Collision of tanker with structures (building, bulk storage tanks/lines). 	<ul style="list-style-type: none"> Bunded Awning Area - Bulk liquids - Storage area 	<ul style="list-style-type: none"> Damage to tanker/valve leading to loss of containment of liquid. Damage to bulk tanks/lines leading to loss of containment. Consequences as for loss of containment 	<ul style="list-style-type: none"> Safeguards as above Bulk tank bund walls are made of re-inforced concrete and are of reasonably rigid construction.
<ul style="list-style-type: none"> Loss of containment of liquids due to a tank/valve /pipe/pump failure or overflow. 	<ul style="list-style-type: none"> Bunded Awning area - Water Treatment Plant - Scrubbers 	<ul style="list-style-type: none"> Release of chemicals to environment via stormwater drainage. 	<ul style="list-style-type: none"> Water treatment bund capacity exceeds the total capacity of the largest piece of equipment. The large clarifier.
<ul style="list-style-type: none"> Loss of containment of liquid due to tank/valve failure/leak or during transfer of liquids between scrubbers and bulk tanks or water treatment plant due to, for example pump/pipe/valve leak/failure or overfilling. 	<ul style="list-style-type: none"> Bunded Awning area - Water Treatment Plant - Scrubbers 	<ul style="list-style-type: none"> Release of chemicals to environment via stormwater drainage. 	<ul style="list-style-type: none"> Scrubbers, bulk tanks and water treatment plant are all in adequately bunded areas. Scrubber solutions are quite dilute and small volume and would not pose a significant threat to the environment.
<ul style="list-style-type: none"> Loss of containment of liquid due to for example tank/valve failure/leak on tanker. tank/valve failure/leak on tanker following tanker crash. 	<ul style="list-style-type: none"> Off Site Transport of bulk liquids 	<ul style="list-style-type: none"> Release of chemicals to environment. Bulk suppliers and waste removers are responsible for emergency procedures "off site" should a spill occur. 	<ul style="list-style-type: none"> These acids and alkalis are routinely transported by road. Quantity delivered to this site will be negligible in comparison with industry and area wide deliveries. Mostly experienced tanker drivers.

FIRE, EXPLOSION AND GAS RELEASES

Possible Initiating Events	Facility of Operation	Possible Consequences	Available Safeguards and Comments
<ul style="list-style-type: none"> Leakage of natural gas used for heating the tanks 	<ul style="list-style-type: none"> Processing Tanks/Pits and Regeneration Plant 	<ul style="list-style-type: none"> Gas release, possibly causing asphyxiation. Flash fire/explosion due to ignition of gas causing damage to equipment and factory building. 	<ul style="list-style-type: none"> Factory ventilation is provided by a ridge ventilator and roof extraction fans. All tanks are earthed reducing the possibility of ignition due to electrostatic charge. Virtual absence of combustible material limits the potential for fire propagation.
<ul style="list-style-type: none"> Emissions of gases from solutions regularly used in tanks 	<ul style="list-style-type: none"> Processing Tanks/Pits and Regeneration Plant 	<ul style="list-style-type: none"> Unacceptably high occupational exposures to respiratory irritants by inhalation. Emissions of flammable hydrogen gas. Flash fire/explosion due to ignition of hydrogen causing damage to equipment and factory building. 	<ul style="list-style-type: none"> Safeguards as for leakage of "natural gas". Gases are extracted from above the tanks and directly vented to the atmosphere after passage through water scrubbers.
<ul style="list-style-type: none"> Emissions of corrosive mists from solutions regularly used in tanks 	<ul style="list-style-type: none"> Processing Tanks/Pits and Regeneration Plant 	<ul style="list-style-type: none"> Unacceptably high occupational exposures to respiratory irritants by inhalation. 	<ul style="list-style-type: none"> Factory ventilation is provided by a ridge ventilator and roof extraction fans. Gases are extracted from above the tanks and directly vented to the atmosphere after passage through water scrubbers.
<ul style="list-style-type: none"> Acid pumped from tanker to the sodium hydroxide by mistake. 	<ul style="list-style-type: none"> Bunded Awning Area - Bulk liquids - Storage area 	<ul style="list-style-type: none"> As well as violent neutralization, reaction with mild steel tank, possibly producing hydrogen, sulphur dioxide with sulphuric acid. Flash fire/explosion due to ignition of hydrogen in flammable range causing damage to 	<ul style="list-style-type: none"> The violence of neutralization with much noise and steam production will make operator aware of error immediately. Only small amounts of gases produced assuming tank was empty. Virtual absence of combustible material limits the potential for fire

Possible Initiating Events	Facility of Operation	Possible Consequences	Available Safeguards and Comments
		equipment and possible propagation to rest of factory.	<p>propagation if a hydrogen fire or explosion were to occur</p> <ul style="list-style-type: none"> All bulk inlets are clearly marked at inlets and locked to prevent unauthorized access.
<ul style="list-style-type: none"> Emissions of unscrubbed / inadequately scrubbed fumes from the scrubbers Due to: <ul style="list-style-type: none"> Spent or no scrubber solution Pump failure Pipe blockage Fan failure 	<ul style="list-style-type: none"> Bunded Awning area <ul style="list-style-type: none"> Water Treatment Plant Scrubbers 	<ul style="list-style-type: none"> Unacceptably high occupational exposures to respiratory irritants if fan fails. 	<ul style="list-style-type: none"> This is not an off-site hazard but it is environmentally responsible to use scrubbers.

SITE EMERGENCY RESOURCES

Fire fighting trained personnel

Training is provided on a regular basis (annual) for all Emergency Response Team members to ensure that fire fighting skills remain current. Records of this training are maintained.

First Aid Trained Personnel

Two employees are trained in Senior First Aid and undergo refresher training every three years. Records of this training are maintained.

Evacuation Drills

At twelve monthly intervals an evacuation exercise is conducted to measure the effectiveness of this plan. All employees are involved in the drill and any deficiencies are noted for corrective action immediately afterwards. A checklist is used to record details.

In The Event of Fire – Water Containment

In the event of a factory fire significant amounts of water may be used in fire fighting and drain to car park areas. This drains to and is collected in a fire water retention pit situated adjacent to outside power transformers.

A control valve remains open to allow normal rainwater to drain freely to storm water. However in the event of fire or other spillage, **the valve must be manually closed to ensure on site containment**. This valve is located beneath a 1 metre square checker plate cover. The site engineer is responsible for this action.

As water waste drains into the pit a submersible pump can be activated manually at the control switch or will be automatically triggered by a float switch as the pit fills. This pumps water from this pit to the oil separator in the water treatment plant.

From here the water overflows into a 32,000 litre bunded area. The liquid is then processed through the water treatment system and released to sewer.

Utilities - Isolation

In the event of an emergency the Plant Engineer is responsible for turning off electricity and L.P.Gas at the mains supply. Chemical bulk storage tanks can similarly be turned off individually depending on the risk of loss of containment. Decisions may be made in conjunction with Emergency Services in attendance.

EMERGENCY RESPONSE EVACUATION

On hearing the **EVACUATION ALARM** or **INSTRUCTION** over P.A. system to immediately evacuate the premises all **Personnel Must:**

- **Evacuate** the building under the direction of Wardens.
- **Leave** the building by the closest, safe exit.
- **Do not** gather belongings
- **Go to** Newton Road ASSEMBLY AREA near dispatch dock.
- **Stay** in your assembly area
- **Do not** re-enter the building until instructed
- **Do not** remove vehicles from the car park
- **Wait** for instructions for returning to work

EMERGENCY EVACUATION PROCEDURES

General Duties of Wardens

- Wardens will check all work areas, offices and rooms including toilets, change rooms and all areas where people could be trapped or unaware of the signal to immediately leave the building.
- They will assist with the safe and speedy evacuation of all personnel to the **Assembly Area**.

Roll Call

- As soon as personnel arrive at the **Assembly Area** a roll call is to be taken to ensure that everyone is accounted for.
- The Site Warden or in his absence the Deputy Warden will call the roll using the **Employee Checklist** and **Visitors Book**.
- This identifies whether employees, visitors or contractors are Present, Absent or Missing and should ensure that everyone is accounted for.
- If there is someone missing, the Site or Deputy Warden must inform –

Or

- The Senior Manager on site
- The Officer-In-Charge of the Emergency Services

All Clear Signal

- When the emergency is over personnel will be advised whether to resume work given alternative instructions.

APPENDIX I – ALPHABETICAL LIST OF CHEMICALS

Product Name	Max Qty Stored	Hazchem	D.G. Class	Hazardous YES/NO
Acetic Acid	50ltr	2P	8	YES
Acetylene Gas		2(S)E	2.1	NO
Ammonia 60%	25 ltrs	2R	8	YES
Caustic Etch 50%	8000 ltr	2R	8	YES
Caustic Etch Additive	8000 ltr	24	8	YES
Ferric Ammonium Oxalate	500 kg	none	none	YES
Nitric Acid 60%	1000 ltr	2PE	8	YES
Novaclean I9A	400 kg	none	none	YES
Novaseal 1000LF	1000 ltr	2Z	6	YES
Oxygen Gas				
Permanent Yellow DHG	1 kg	none	none	NO
PolyFloX 089D	25 ltr	none	none	NO
Sanodal Blue G	1 kg	none	none	NO
Sanodal Deep Black MLW	1 kg	none	none	NO
Sanodal Red B3LW	1 kg	none	none	NO
SAS 610	25 ltr	n/a	n/a	YES
SAS 611	25 ltr	n/a	n/a	YES
Stabiliser	250 ltr	none	none	YES
Stannous Sulphate	100 kg	none	none	NO
Sulphuric Acid 98%	4500 ltr	2P	8	YES