

1. PURPOSE

- 1.1. The purpose of this Pollution Incident Response Management Plan ('PIRMP') is to provide an effective and appropriate procedure to communicate to Geelong Leather Culcairn ('GLC') workplace participants and relevant authorities, a pollution incident that causes or threatens material harm to the environment. It provides clear guidance to support a measured and coordinated response, should an incident occur requiring implementation of the PIRMP.
- 1.2. The plan enables minimisation and control of risks of environmental harm by implementing key actions to identify and manage those risks. Implementation of the plan will be assisted by trained workplace participants, in addition to their roles in its testing and review on a regular and timely basis.

2. SCOPE

- 2.1. This procedure is applicable to all GLC employees including labour-hire, contractors and visitors, collectively known as "**workplace participants**". All trained workplace participants will ensure GLC's compliance and legal obligations are met under this PIRMP.
- 2.2. All environmental risks and environmental incidents will be managed through the implementation of this Plan. The PIRMP also details the pre-emptive actions that have been implemented at the site, these include:
 - a) Specific measures implemented to minimise the risk of an incident occurring due to spillage, storage of hazardous materials or fire;
 - b) inventory of potential pollutants on site;
 - c) minimum safety equipment requirements;
 - d) communication with the community;
 - e) minimising harm to persons;
 - f) training of personnel; and
 - g) testing of the PIRMP

3. STANDARDS AND LEGISLATION

- 3.1. Protection of the Environment Operations Act 1997; Part 5.7A
- 3.2. Protection of the Environment Operations General Regulations 2009
- 3.2. EPA Guideline: Pollution Incident Response Management Plans

4. DEFINITION OF POLLUTION INCIDENT

4.1. The definition of a pollution incident is;

- a) 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.
- b) 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 involving only the emission of any noise.

5. AIMS AND OBJECTIVES

- 5.1. The GLC PIRMP is to be used for supporting the planning, maintenance and safe response to incidents, and consider site specific requirements. The PIRMP works in conjunction with procedures listed in **Section 10**.
- 5.2. Maintenance of the GLC PIRMP shall be in accordance with the applicable sections of the GLC Environmental Procedures and the site-specific EPA NSW Licence (3465) requirements.
- 5.3. The plan must comply with the new requirements introduced by the *Protection of the Environment Legislation Amendment Act 2011* (POELA Act). The Act includes a new requirement under Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEO Act) to prepare, keep, test and implement a pollution incident response management plan.
- 5.4. **Testing of Plan** - The plan must be tested and routinely reviewed at least once every 12 months¹, Test records of the PIRMP are recorded in the SR1.1 - Emergency Evacuation Register and summarised in **Section 20**;
 - a) Testing and review must cover all components of the plan including the effectiveness of training. The review will consist of a desktop review of the content within this PIRMP to ensure accuracy. A review of the testing of the plan (i.e. emergency exercise) will be undertaken following each exercise to determine any required modifications to this PIRMP.
 - b) Records of the testing, revision and updates made must be dated including workplace participants who performed the testing, revision and updates.

¹ GLC conducts monthly emergency evacuation practise drills including scenario drills for specific departments over and above the 12 monthly requirement for the PIRMP.

- c) In the instance where a potential pollution incident may have occurred, the plan is to re-test and review within one month of the incident occurring. All records of updates are to be maintained.

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

- a) harm to the environment is material if:
 - i. it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
 - ii. it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and
- b) Loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.
- c) Pollution Incidents covered by this plan include:
 - i. Fire;
 - ii. Explosion; and
 - iii. Hazardous material spill/toxic emissions.

6. ENVIRONMENTAL PROTECTION LICENSE DETAILS AND SITE PLANS

6.1. EPL Summary;

DETAILS	
License (EPL) Number	3465
Licensee's Name	Geelong Leather Pty Ltd
Premises Address	116 Schnaars Road, Culcairn, NSW 2660
Scheduled Activities	Livestock processing activities
Fee Based Activities	Tanneries or Fellmongeries ²
Scale	>10000 T annual processing
EPA Risk Assessment Result	Overall Regulatory Priority – LOW Environmental Management Category – A Overall Environmental Risk Level – LEVEL 1

² Meaning the manufacture of products derived from the slaughter of animals occurring in tanneries or fellmongeries (that is, operations that process animal skins or other animal products to produce leather or other similar products).

6.2. **Refer to attached Diagrammatic Representation Site Plans;**

- a) Dangerous Goods Depots Site Plan, **Figure 2**
- b) Drainage Site Plan, **Figure 3**
- c) Wastewater Plant, **Figure 4**
- d) Emergency Evacuation Site Plan, **Figure 5**
- e) Hydrogen Sulphide Gas Hazard Areas, **Figure 6**

7. DESCRIPTION OF SURROUNDING AREA

7.1. Facility and Schedule of Exercises:

- a) The Tannery is situated 4 km outside Culcairn, a small country town in the southeast Riverina region of New South Wales. Culcairn is located in the Greater Hume Shire Council Local Government area on the Olympic Highway between Albury and Wagga Wagga.
- b) The plant facility can be described as follows:
 - i. Office Block – Administration and Management;
 - ii. WHS/Training Office;
 - iii. IMS Administration Office;
 - iv. Training Room;
 - v. Main Factory – 6 x Tanning Drums, 2 x Processors; Samming Machine, Wetblue Storage racking, Automatic Hide Stacker;
 - vi. Preserving Area – 4 x Mixers
 - vii. Fleshing Shed – Fleshing Machine and continuous chain systems, 2 x small skin fleshing machines
 - viii. Chillers – 3 x chillers used for storage of green hide receivals, fleshed production, ice, head pieces and tallow;
 - ix. Chemical Storage Shed – Storage of all powdered tanning process chemicals. This also includes all receivals and dispatch of chemicals (Depot 3 and Depot 3A);
 - x. Chemical Weighing Shed – Preparation of all powder chemicals for tanning process (storage of 1 ton or less per powder chemical);
 - xi. Transit Shed – storage of salted sheepskin, goatskin, kangaroo pallets and any other items not destined for the tannery in transit between sites;
 - xii. Laboratory – Daily analytical Wetblue sample testing and monthly sample collection of wastewater samples;
 - xiii. Wastewater Shed – Preparation of all wastewater treatment chemicals, storage of all wastewater chemicals and general administration of the wastewater plant;
 - xiv. Chrome water treatment - 1 x collection pit, 1 x clarifier, 1 x settling cone, 1 x fat tank and 1 x filter press.
 - xv. Non-chrome water treatment - 2 x collection pits, 1 x clarifier, 1 x sludge tank, 1 x supernatant tank and 3 x irrigation tanks;
 - xvi. Maintenance Workshop – daily preventative maintenance operations as well as storage of all machine spares for the factory.

7.2. Piezometers:

- a) The tannery is situated on 470³ ha of farming land. Thirteen⁴ Groundwater Monitoring points (piezometers) are strategically placed in and around the perimeter of the fence line which enables Geelong Leather to monitor our underground aquifer against any unlikely adverse effects from applying irrigation effluent to the land.



7.3. Sensitive Receptors:

- a) Sensitive receptors in the vicinity of the Tannery Facility are described and shown in the following table and image. These receptors represent existing rural and urban residential premises, including the residential premises owned by Geelong Leather, of the Culcairn townsite.

³ Tannery Farm = 285 ha and Buchlyvie Farm = 185 ha

⁴ Tannery Farm = 8 Piezometers and Buchlyvie Farm = 5 Piezometers

EP1.2 – POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN



RECEPTOR ID	COORDINATES		LOCATION FROM TANNERY		RECEPTOR TYPE
	LATITUDE	LONGITUDE	DISTANCE (M)	DIRECTION	
R1	35°40'5.40" S	147°1'56.11" E	3,080	E	Urban residential (Culcairn Townsite)
R2	35°39'46.45" S	147°2'0.22" E	3,160	E	Urban residential (Culcairn Townsite)
R3	35°38'52.36" S	146°59'35.32" E	1,850	N	Rural residential
R4	35°38'50.24" S	146°58'37.02" E	2,730	NNW	Geelong Leather residential
R5	35°40'3.83" S	146°58'24.78" E	2,270	WSW	Rural residential
R6	35°40'11.03" S	146°58'51.22" E	1,700	SW	Rural residential
R7	35°40'1.37" S	147°0'5.97" E	410	SE	Culcairn Tip
R8	35°40'21.48" S	147°0'22.61" E	1,150	SE	Rural residential
R9	35°40'39.85" S	147°0'39.40" E	1,870	SSE	Rural residential
R10	35°40'13.77" S	147°1'36.29" E	2,640	ESE	Rural residential



7.4. Tannery Spill Containment Moat:

- a) The tannery is surrounded by a clay lined moat with a sump on the southwestern corner in front of the unused evaporation pan. In the event of any large-scale spills⁵ that reach the moat, the spill will flow to the sump and be pumped back into the non-chrome pit for retreatment. The moat has a holding capacity of approximately 750,000 Lts ensuring any unlikely large-scale spills can be contained and retreated through the onsite wastewater treatment plant.
- b) After a spill the moat must be flushed and any contaminated soil remaining must be removed and treated for disposal⁶.
- c) Factory rainwater is collected within the moat, which is usually treated in the effluent plant, however in some circumstances the following actions may need to be taken;
 - i. During Heavy rainfall and any flooding events, divert factory rainwater drains from the moat to the evaporation dam;
 - ii. In the event a chemical storage area is affected by flooding, ensure that it is directed to the wastewater plant for treatment.
- d) GLC is not connected to a stormwater system and therefore has to discharge excess rainfall to the unused evaporation pan. A red flashing beacon will be activated by the change in valve settings to indicate that the sump is directed to the evaporation pan instead of the Wastewater plant.

7.5. The below image identifies the spill containment moat (green line) surrounding the factory. The sump pump (red line) in the southwestern corner of the moat identifies the pipelines either to the onsite wastewater treatment plant or the unused clay lined evaporation pan. Refer to **Figure 3** for further drainage details.

⁵ Large scale spills refer to potential failure of irrigation tank or overflowing sludge tanks but not limited to large scale liquid chemical overflows of concrete drains behind Depot 2.

⁶ ESOP1.3 - Emergency Response to Wastewater Spillage



7.6. Geology and Regolith:

Unconsolidated riverine deposits of clay, silt, sand and gravel including the floodplain, ancient channel deposits and alluvial terraces.

7.7. Topography:

The Tannery Farm is an extensive (<5 km wide) level alluvial plains of Billabong Creek near Culcairn. Slopes range 0-2%, local relief is <5m and altitude ranges 200-250m. The typical landform elements include extensive to broad plains with deeply incised sparse drainage lines.

The Buchlyvie Farm is rectangular shaped, predominately flat with a very slight 1-1.5% fall. The northwestern corner has a small, short drain which runs across the paddock towards the culvert under the road. The land has a number of old eucalyptus trees, but mostly grey box trees. The soils are mostly a heavy sodosol grey clay.

7.8. Vegetation:

The native vegetation is dominated by eucalypts. Eucalypts are the largest tree family in Australia and have adapted to Australia's climatic regions developing more than 900 separate species. Examples of some species surrounding Culcairn's area are extensively cleared *Eucalyptus Blakelyi* (Blakely's red gum) and *E. melliodora* (yellow box) woodland, with *E. macrocarpa* (grey box), *E. albens* (white box) and *E. Bridgesiana* (apple box), *E. camaldulensis* (river red gum) occurs along the creeks.

7.9. Land Use of the Region:

The land is used mainly for cereal and canola cropping with sheep and cattle grazing on improved pasture. Some areas along large gullies have been fenced off and left to native vegetation.

Doughty, D, 2003, Soil Landscapes of the Holbrook-Tallangatta 1:100 000 Sheet; Depart of Sustainable Natural Resources, Sydney.

8. OVERVIEW OF ACTIVITIES ON SITE

- 8.1. Bovine hides ('hides') processed at GLC are obtained mainly from a variety of abattoirs in Victoria and southern New South Wales districts. GLC processes hides to a stage of treatment known as "Wetblue." Kangaroo skins ('skins') are obtained mainly from the Forbes facility and are contract processed to the stage of treatment known as "Pickle".
- 8.2. The step-by-step process for hides is:
- Receiving fresh hides from the abattoirs after a day's kill.
 - The hides are then preserved and washed in mixers that same night and stored in a chiller until ready for the fleshing operation the following day.
 - The fleshing operation removes as much of the fat and unwanted trimmings (fleshing) from the hide as possible. Fats and trimmings from the fleshing operations are further recycled within the surrounding district as tallow.
 - After fleshing, the hides are stamped for traceability before they are treated and processed in large drums to remove hair and any remaining cellular proteins. They are then chemically treated to the standard known as "Wetblue".
 - The wetblue hides are then removed from the drums and passed through a revolving wringer known as a Samming Machine.
 - After the Samming operation, the wetblue hides are weighed, measured, graded and packed ready for Full Substance Grading Shipment.
- 8.3. The step-by-step process for skins is:
- Receiving skins frozen or fresh direct from the supplier.
 - The skins are then inspected and sorted and stored in a chiller until further processing.
 - The skins are preserved and washed in the mixers and stored in a chiller until further processing.
 - The skins are then chemically treated to a stage known as "Limed" skins in a processor, once removed from the process in this state the skins are stored and covered in bins prior to fleshing.
 - The fleshing operations removes as much of the fat as possible, and the kangaroo harvest tag is removed. Fat removed from skins are further recycled within the surrounding district as tallow.
 - After fleshing the skins are then chemically treated in processor to a standard known as "Pickled" skins
 - The pickled skins are then measured, graded and packed for shipping.

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- 8.4. With the on-site wastewater treatment plant, **Figure 4** GLC more than meets environmental guidelines for wastewater discharge levels for irrigation and sludge injection.

9. CONTACT INFORMATION

- 9.1. The protocol for Industry Notification of Pollution Incidents (Part 5.7 of the POEO Act) requires that the occupier of premises, the PCBU or any person carrying on the activity which causes a pollution incident to immediately notify each relevant authority (identified below) when material harm to the environment is caused or threatened.

(<http://www.environment.nsw.gov.au/pollution/notificationprotocol.htm>)

- 9.2. Firstly, call 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.

- 9.3. If the incident does not require an initial combat agency, or once the 000 call has been made, notify the relevant **Authorities** in the following order;

NO	APPROPRIATE REGULATORY AUTHORITY ⁷	CONTACT
1	EPA	13 15 55
2	Greater Hume Shire Council	(02) 6036 0100
3	SafeWork	13 10 50
4	Fire & Rescue NSW	1300 729 579
5	Emergency Services	000
6	Ministry of Health (www.health.nsw.gov.au/publichealth/infectious/phus.asp)	(02) 9391 9000

9.4. Site Contacts;

NAME	TITLE	CONTACT NO
Tara Jongeneel	Chief Fire Warden	0401 521 608
Adrian Jongeneel	Deputy Fire Warden	0409 886 994
Stacey Kenyon	Fire Warden	0407 117 226
Simon Randall	Fire Warden	0407 117 226
Jay Stottelaar	General Manager	0409 990 238
Matt Woodford	Operations Supervisor (24 Hour Site Contact)	0407 880 609
Will Bunyan	Maintenance Manager	0417 366 144
Claudio De Brito	Technical Manager	0413 165 725
Brendan Hodges	Assistant Technical Manager	0439 173 957
Silvia Rowe	WHS Manager	0438 678 369

⁷ The Appropriate Regulatory Authority (ARA) for the activity under the POEO Act (usually the EPA or local authority) – the local authority is a local council of an area under the Local Government Act 1993)

10. ENVIRONMENTAL INCIDENT

- 10.1. In the event of an environmental incident or emergency, communication is essential to ensure an efficient response to the incident / emergency. This will assist in minimising the effects of the incident while at the same time maximising the preservation of life. Refer to **Figure 5** for emergency evacuation routes.
- 10.2. The incident response process is outlined in **Figure 1** and includes initial containment, clean-up, notification and investigation. In addition, incident response procedures are further detailed within the following documents:
- a) **IP1.2 - Emergency Response Procedure**; Provides procedures to be followed in the event of an emergency (including environmental incidents).
 - b) **IP1.1 – Hydrogen Sulphide Gas Procedure**; Provides procedures to be followed to avoid or minimise harm to the environment, adverse effects to human health or the creation of nuisance odour situations.
 - c) **ESOP1.3 - Emergency Response to Wastewater Spillage**; Details requirements for notification, containment and clean-up of spills.
 - d) **SSOP1.5 – Chemical Spill Response**; Details requirements for notification, containment and clean-up of spills.
 - e) **IP1.4 – Dangerous Goods and Hazardous Substance Procedure**; Provides procedure to ensure all Chemicals and Substances comply with Legislation, Codes of Practice and Standards for handling, storage and use during operations on site.
 - f) **SSOP1.17 – Wetblue Chemical Identification and Descriptions**; Provides information identifying the class of each processing chemical and reactions that will occur if the different classes are mixed together.
 - g) **SSOP1.19 – GasGard XL Controller**; Details the use of the fixed wall mounted gas detector used to monitor indoor industrial locations for the presence of Hydrogen Sulphide (H₂S) levels.
 - h) **IF14 - Incident and Investigation Report**; Is used for the reporting and investigation of environmental incidents. Includes a description of the incident, risk assessment and identification of corrective actions. Further details listed in **Section 16**.

11. LIQUID POLLUTION IDENTIFICATION - DANGEROUS GOODS AND HAZARDOUS SUBSTANCES

11.1. Wastewater Chemicals:

- a) The chemicals are specifically used in the wastewater operation (Refer table below).

POLLUTANT INVENTORY	STORAGE LOCATION	AMOUNT STORED
Causmag XLM	Wastewater Shed	4000 kg
Lime	Wastewater Shed	1000 kg
Manganese Sulphate	Wastewater Shed	1000 kg
Cationic Polymer; Non chrome effluent	Wastewater Shed	500 kg
Anionic Polymer; Chrome effluent	Wastewater Shed	500 kg
Defoaming Agent	Wastewater Plant – Irrigation tanks 1, 2, 3	1000 Lt

11.2. Wetblue Production Chemicals:

- a) Several chemicals are specifically used in the wetblue production operation (Refer table below).
- b) For precise storage location refer to the Dangerous Goods site map, **Figure 2**.

DEPOT #	STORAGE TYPE	CHEMICAL CLASS	AMOUNT STORED	CHEMICAL TYPE
1	Above Ground Tank	Class 2.1	2,275 Lt	Liquefied Petroleum Gas
2	Roofless Store - Dosing	Class 8; PGII, PGIII	6,000 kg	Corrosive Liquid, NOS Formic Acid 85% Caustic Alkali Liquid NOS
2a	Roofless Store - Storage	Class 8; PGII, PGIII	28,000 kg	Corrosive Liquid, NOS Formic Acid 85% Caustic Alkali Liquid NOS
2b	Roofless Store - Storage	Class 8; PGII	1,000 kg	Caustic Alkali Liquid NOS
3	Roofed Store	Class 8; PGII	80,000 kg	Sodium Sulphide Hydrated Sodium Hydrosulphide
3a	Roofed Store	Class 5.1; PGII	18,000 kg	Sodium Carbonate Peroxyhydrated
4	Above Ground Tank	Class 8; PGII	18,000 Lt	Sulphuric Acid 73%
5	Above Ground Tank	Class 2.2	12,500 Lt	CO2 Bulk Storage
x	Above Ground Self-bunded Tank	Class 2	1,500 Lt	Diesel Storage

11.3. Wastewater Pollutants:

- a) Two Separate drainage systems for the non-chrome irrigation effluent and chrome effluent have been constructed to prevent any cross-contamination of the respective effluent liquors. Refer to **Figure 3**, for drainage site plan.
- b) Holding tanks for treatments and storage of non-chrome irrigation effluent, chrome effluent and sludge are specifically used in the wastewater operation. Refer to **Figure 4**, for tank locations.

POLLUTANT INVENTORY	WASTEWATER STORAGE LOCATION	AMOUNT STORED
Untreated Chrome Effluent	Chrome Drainage System	25,000 Lt
Untreated Chrome Effluent	Chrome Collection Pit	65,000 Lt
Untreated Chrome Effluent	Chrome Fat Tank	40,000 Lt
Treated Chrome Effluent	Neutralizing Tank	9,000 Lt
Treated Chrome Effluent	Chrome Clarifier	15,500 Lt
Treated Chrome Effluent	Chrome Settling Cone	26,000 Lt
Treated Chrome Effluent	Chrome Plate Press - Cake	800 kg
Untreated Non-Chrome Effluent	Non-Chrome Drainage System	37,000 Lt
Untreated Non-Chrome Effluent	Non-Chrome Collection Tank	120,000 Lt
Untreated Non-Chrome Effluent	Non-Chrome Collection Pit	100,000 Lt
Treated Non-Chrome Effluent	Non-Chrome Clarifier	70,000 Lt
Treated Non-Chrome Effluent	Non-Chrome Sludge Tank	58,000 Lt
Treated Non-Chrome Effluent	Supernatant Tank	9,000 Lt
Treated Non-Chrome Effluent	Irrigation Tank 1	300,000 Lt
Treated Non-Chrome Effluent	Irrigation Tank 2	300,000 Lt
Treated Non-Chrome Effluent	Irrigation Tank 3	350,000 Lt

11.4. Containing Spills On-Site:

- On site there are many Dangerous Goods and Hazardous Substances. Workplace participants will be provided with “Chemical Response” training to ensure they can safely clean up and dispose of any spills that may occur;
- Spills are to be cleaned up immediately using the spill kit; and
- The Operations Supervisor and General Manager must be notified immediately of any on-site or off-site spills.
- For all Major Wastewater pollutant spills, refer to *ESOP1.3 - Emergency Response to Wastewater Spillage*.

11.5. Spill Kits Are Located On-Site in The Following Areas:

- Wastewater Shed;
- Maintenance Shed;
- Chemical Storage Area; and
- Wet Blue Drums.

- 11.6. Spill kits contain instructions, absorbents and protective equipment to clean up any spills.
- A low risk or minor spill is one that workplace participants should be capable of handling safely after receiving appropriate training.
- 11.7. Operators must wear appropriate personal protective equipment when cleaning up any spills including:
- a) Chemical suit;
 - b) Long sleeve shirts and pants;
 - c) Safety glasses/face shield/goggles;
 - d) Gloves/chemical gloves;
 - e) Chemical splash apron/Chemical resistant overalls and respirator;
 - f) Non-slip footwear/safety boots;
- 11.8. **Treating Non-Mobile Spillages:**
- a) Once a spillage has been immobilised it must be disposed of as follows:
 - i. **Chemicals** – consult the SDS and the “*SSOP1.5 - Chemical Response*”. Follow the instructions and dispose of accordingly.
 - ii. **Chrome containing solid waste** – shovel sand and chrome into chrome waste bin used in the samming department for treatment in the waste mixer.
 - iii. **Non-chrome solid waste** – shovel sand and solid waste into a side spout bin and rotate into non-chrome sludge tank for injection.
 - iv. **Non-chrome irrigation effluent** – if the non-chrome effluent spill can be immobilised with the sand, treat it as per (iii) otherwise refer to “*ESOP1.3 - Emergency Response to Wastewater Spillage*”.

12. AIR EMISSION POLLUTION IDENTIFICATION - HYDROGEN SULPHIDE GAS (H₂S)⁸

- 12.1. Hydrogen Sulphide Gas ('H₂S') is a colourless gas with the characteristic foul odour of rotten eggs. It is heavier than air, so it will settle in the bottom of tanks, pits and drums and is very poisonous, corrosive, flammable, explosive and can be fatal, **Figure 6**.
- 12.2. Wetblue processing and wastewater activities carried out at GLC have the potential to cause adverse effects on air quality through the emission of substances such as H₂S.
- 12.3. GLC aim to identify, assess and minimise harm to the environment, any adverse effects to human health, or any nuisance situation from air emissions due to their operations as well as comply with relevant air quality guidelines and legislation.
- 12.4. The drums are equipped with a fume extraction and wet scrubbing system to remove the H₂S as well as other gases. 100 kg of Sodium Percarbonate is stored on the mezzanine level for emergency dosing of drums and hide processors to eliminate hydrogen sulphide gas.
- 12.5. **Hydrogen Sulphide Gas Emergency Equipment:**
- a) A H₂S Evacuation Kit is located in the First Aid Room. The First Aid Room has a dedicated H₂S Evacuation "shelf" which contains emergency breathing apparatus, portable gas detectors, emergency phone numbers, a copy of the Procedure and an emergency checklist. Additional Emergency Breathing Apparatus and spare Multi-Gas detectors are also located in the control Room.
 - b) Half face respirators which filter H₂S gas are issued to all drum and wastewater workplace participants and are to be worn when opening the chemical doors during deliming, pickling, chrome additions and also when entering confined spaces in wastewater or drainage systems, even after testing has found no H₂S present. Half face respirators should also be worn during an evacuation.
 - c) A confined space kit containing a rope rescue kit, harness, , risk assessment, rescue plans, warning signs and lockout kit is located next to the chrome sludge settling tank for confined space use.

⁸ Refer to IP1.1_Hydrogen Sulphide Gas Procedure

13. DETERMINING THE SIGNIFICANCE OF ENVIRONMENTAL ASPECTS⁹

13.1. The significance of the identified environmental aspects will be determined by considering the consequence and likelihood of impacts arising from the aspects. The significance will be given a category as per the following **Table 1**.

13.2. Consequence:

- a) Consequence will be considered as **SEVERE** if:
 - i. Irreversible and extensive damage is caused to the environment and human health;
 - ii. The receiving environment is known to be sensitive;
 - iii. The impact is known to be permanent;
 - iv. The impact is high and wide scale;
 - v. A breach of license conditions results; or
 - vi. Major business disruption occurs.
- b) Consequence will be considered as **MAJOR** if:
 - i. Significant damage is caused to the environment or human health that involves either extensive remediation or relocation;
 - ii. The receiving environment is known to be sensitive;
 - iii. The impact is known to be long-lived;
 - iv. The impact is high;
 - v. A breach of license conditions results; or
 - vi. Significant business disruption occurs.
- c) Consequence will be considered to be **MODERATE** if:
 - i. Moderate damage to the environment or human health;
 - ii. The receiving environment is possibly sensitive;
 - iii. The impact is short-lived;
 - iv. The impact is smaller;
 - v. No breach of license condition results; or
 - vi. Some business disruption occurs.

⁹ Refer to EM05 – Environmental Aspects

- d) Consequence will be considered to be **MINOR** if:
 - i. Minor damage to the environment or human health that is immediately managed on-site;
 - ii. The receiving environment is not sensitive;
 - iii. The impact is short-lived;
 - iv. The impact is small;
 - v. No license conditions are breached; or
 - vi. No disruption of business occurs.

- e) Consequence will be considered to be **INSIGNIFICANT** if:
 - i. Negligible damage to the environment or human health which is fully recoverable with no permanent impact on the environment or human health;
 - ii. The receiving environment is not sensitive;
 - iii. The impact is short-lived;
 - iv. The impact is trivial;
 - v. No license conditions are breached; or
 - vi. No disruption of business occurs.

13.3. Likelihood:

- a) Likelihood will be considered as **ALMOST CERTAIN** if:
 - i. The risk is expected to occur; or
 - ii. Occurrence is inevitable; or
 - iii. May occur many times.

- b) Likelihood will be considered as **LIKELY** if:
 - i. The risk will probably occur in the circumstances present; or
 - ii. Occurrence not surprising; or
 - iii. May occur more than once.

- c) Likelihood will be considered as **POSSIBLE** if:
 - i. The risk could occur at some time; or
 - ii. Likely to occur sometime.

- d) Likelihood will be considered as **UNLIKELY** if:
- i. The risk is not likely to occur in normal circumstances; or
 - ii. Unlikely to occur, though conceivable.
- e) Likelihood will be considered as **RARE** if:
- i. The risk is very unlikely; or
 - ii. The risk is so unlikely that probability is close to zero.

TABLE 1

LIKELIHOOD	CONSEQUENCE				
	SEVERE - 5	MAJOR - 4	MODERATE - 3	MINOR - 2	INSIGNIFICANT - 1
ALMOST CERTAIN - 5	EXTREME – 25	EXTREME – 20	HIGH – 15	MEDIUM – 10	MEDIUM – 5
LIKELY - 4	EXTREME – 20	HIGH – 16	HIGH – 12	MEDIUM – 8	LOW – 4
POSSIBLE - 3	HIGH – 15	HIGH – 12	MEDIUM – 9	MEDIUM – 6	LOW – 3
UNLIKELY - 2	MEDIUM – 10	MEDIUM – 8	MEDIUM – 6	LOW – 4	LOW – 2
RARE - 1	MEDIUM – 5	LOW – 4	LOW – 3	LOW – 2	LOW – 1

13.4. ER1.3 - Register of Aspects;

PRIORITY	ACTIVITY	ELEMENT	MODE OF OPERATION	ASPECTS	IMPACTS	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD PRIOR CONTROL	CONTROL	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD AFTER CONTROL
1	Drums & Processors a) Processing of Hides and Skins b) Hides processed in Drums 1 to 6 c) Skins processed in Processors P1 and P2	Air	Normal	Odour – Air Emissions, Hydrogen Sulphide Gas (H ₂ S), Ammonia (NH ₃), Sulphur Dioxide (SO ₂) and Carbon Monoxide	a) Health effects for workplace participants b) Odour - Nuisance to neighbours	EXTREME - 25	a) Odour extraction from each drum and processor through wet scrubber b) EPA License c) Ektimo – Emission Testing d) MSA fixed H ₂ S gas monitoring with warning lights and factory wide audible alarm at every drum, control room and processor prep tanks e) All personal required to wear personal H ₂ S detectors when working in areas where H ₂ S may be present f) Self-contained breathing apparatus and rescue air available for rescue and escape. g) All operators issued with half face respirators capable of filtering H ₂ S and NH ₃ gas h) Air curtains installed at Door 1, preventing nuisance odour escapes from the factory i) Scenario Drills specifically for H ₂ S evacuations after hours as well as full site evacuations j) H ₂ S competency Tests required for all operators	MEDIUM - 10
2	Drum & Processor Processing a) Irrigation	Water	Normal	Chrome wastewater, grease, salinity	a) Possible contamination of ground water	EXTREME - 25	a) Separate plumbing to Chrome Treatment Plant b) Evaporation pan used from May to September each year to reduce excess salinity produced from chrome separation treatment. c) ESOP1.5 – Chrome Effluent Treatment d) Monthly samples collected and analysed by NATA Lab e) EPA License f) Annual Performance Summary Report to address any Impacts from increased levels	MEDIUM - 5
3	Drum & Processor Processing a) Irrigation b) Sludge injection	Water	Normal	Chlorides in non-chrome wastewater	a) Possible contamination from Kangaroo pickle processor into NC collection pit.	EXTREME - 25	a) Separate plumbing to the pickle recycle tank farm. b) Automatic overflow valve installed for NC pickle collection tank to WB pickle bund in the event excess pickle produced during the pickling process.	MEDIUM - 5

EP1.2 – POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

PRIORITY	ACTIVITY	ELEMENT	MODE OF OPERATION	ASPECTS	IMPACTS	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD	CONTROL	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD
						PRIOR CONTROL		AFTER CONTROL
					b) Inhibit crop growth with continued excess levels of chlorides averaging >1500ppm		c) Excess NC pickle will be collected in WB pickle bund and treated through the chrome treatment plant. d) Sealed stainless steel bins for off-loading pickled skins. e) Pickle skin grading shed in bunded area for collection of dripping pickle off skins in an IBC for treatment in chrome plant. f) Monthly samples collected and analysed by NATA Lab g) EPA License h) Annual Performance Summary Report to address any Impacts from increased levels	
4	Drum & Processor Processing a) Evaporation Dam	Air	Abnormal	Chrome supernatant wastewater, grease, salinity	a) Odour – Nuisance to Neighbours	EXTREME - 25	a) Restrict discharge to dam from June to September b) Odour control chemicals c) De-odourise chemical available to treat and naturalize immediate odours d) EPA License	MEDIUM - 10
5	Drum, Processor & Mixer Processing a) Irrigation	Water	Normal	Non-chrome wastewater, solid reusable waste, BOD, COD, TDS, SS, TKN	a) Possible contamination of ground water	EXTREME - 25	a) Farm management plan for application of effluent to land b) EPA License c) ESOP1.4 – Non-Chrome Effluent Treatment d) ESOP1.6 – Hardhose Irrigation e) ESOP1.7 – Pivot Irrigation f) Irrigation Management Plan g) Annual samples collected from 13 piezometers around the irrigation sectors and analysed by NATA Lab. h) Annual Performance Summary Report to address any Impacts from increased levels	MEDIUM - 5
6	Drum, Processor & Mixer Processing a) Irrigation	Land	Abnormal	Irrigation pipe or equipment failure on utilization areas for	a) Possible pooling b) Possible surface run-off onto neighbouring property	EXTREME - 20	a) Restrict unmonitored irrigation away from irrigation sectors where it is possible for surface run-off to occur if hard hose irrigator fails to move.	MEDIUM - 5

EP1.2 – POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

PRIORITY	ACTIVITY	ELEMENT	MODE OF OPERATION	ASPECTS	IMPACTS	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD	CONTROL	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD
						PRIOR CONTROL		AFTER CONTROL
				irrigation effluent discharge	c) Possible contamination of livestock drinking water dams		b) Irrigation system fitted with high flow detection to stop irrigator if irrigation pipe fails c) Dirt bund wall built around low western corner of sector 12 and along entire western boundary of Buchlyvie farm to stop unlikely surface run-off d) Hard hose irrigator started by wastewater operators on Saturdays to restrict unmonitored turbine failures e) Critical points along boundary fence to be inspected daily during high rainfall events f) Irrigation sectors to be inspected daily with drone after each irrigation event during high rainfall periods g) 25m boundary exclusion zone will act as a buffer for overspray and pooling h) Annual samples collected from all 20 irrigation sectors and analysed by NATA Lab. i) Annual Performance Summary Report to address any Impacts from increased levels	
7	Chemical Storage	Land/Air	Normal	Spillage/Explosion	a) Possible contamination of storm water and soils b) Possible explosion of chemicals being stored incorrectly	EXTREME - 20	a) All chemical storage areas have bund walls, drains and sumps to contain and send spills to onsite wastewater plant for treatment b) Tannery surrounded by moat to capture spills as final protection (against large scale spill such as tank failure) c) Large sump installed in moat can pump back any large spills to the onsite wastewater treatment plant d) Compliant with DG License; Manifest, site plans, Chemical Substance Register, SDS's up to date e) Spill kits accessible and located across site f) Chemical storage Depots for Dangerous Goods clearly label/marked. g) Follow IP1.4 - Dangerous Goods and Hazardous Substance Procedure and SSOP1.17 – Wetblue Chemical Identification and Description	LOW - 4

EP1.2 – POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN



PRIORITY	ACTIVITY	ELEMENT	MODE OF OPERATION	ASPECTS	IMPACTS	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD	CONTROL	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD
						PRIOR CONTROL		AFTER CONTROL
8	Fire Protection	Air	Abnormal	Bush Fire	a) Possible destruction of facility by bush fire damage	EXTREME - 20	a) Tannery is fully equipped with firefighting equipment which is serviced and maintained on a regular basis. b) 4ML dam available and fitted with Storz 125-5 adapter enabling fire trucks to pump directly from dam c) Evacuation Procedure d) Fire Warden training e) Monthly evacuation drills f) Firebreaks around each paddock made by farm contractors each fire season g) Aerosols, paints and solvents stored in fire and explosion resistant cabinets with flues to vent fumes outside building h) Garden around plant keep green and trimmed to reduce fuel load of any potential fire hazard	MEDIUM - 8
9	Drum Processing	Waste	Normal	Transport of Chrome waste – Chrome cake, Tanned trimmings fibres and chrome contaminated hair	a) Waste to Landfill b) Odour - Nuisance to neighbours c) Restricted Solid Waste	HIGH - 16	a) Treated onsite with lime to prevent any leakage and odour b) EPA License c) Annual Waste Classification testing completed to ensure compliance with General Solid Waste parameters for disposal at landfill d) ESOP1.2 – Waste Disposal e) Waste Tracker Portal NSW tracks all movements of chrome f) Transporter registered with NSW EPA to transport Chrome g) Risk assessment completed for chrome transport	LOW - 4
10	Drum Processing	By-Product	Normal	Transport of Non-Chrome waste – ears, horns, pigskins	a) By-product to Renderers b) Odour - Nuisance to neighbours and road users	HIGH - 16	a) Collected daily and stored in fridge until transported to Renderers b) When possible, ears and snouts sold for dog chews. c) EPA License d) ESOP1.2 – Waste Disposal	LOW - 4

EP1.2 – POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN



PRIORITY	ACTIVITY	ELEMENT	MODE OF OPERATION	ASPECTS	IMPACTS	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD PRIOR CONTROL	CONTROL	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD AFTER CONTROL
11	Drum Processing	By-Product	Normal	Transport of cattle and kangaroo hair	a) By-Product to Compost b) Odour- Nuisance to neighbours	HIGH - 16	a) All waste to be transported to composting facility. b) in the event of the composting facility unable to receive waste, divert to licensed landfill c) EPA License d) ESOP1.2 – Waste Disposal e) Cross Border permits – consignment numbers f) Waste tracker portal VIC tracks all movements of hair transport. g) Transporter registered with NSW and VIC EPA to transport hair. h) Risk assessment – completed for transport of hair i) Annual Waste Classification testing completed to ensure compliance with composting requirements.	LOW - 4
12	Transport	Land Air	Normal	Raw hides, blood, Fat & grease, BOD	a) Public Amenity b) Odour	HIGH - 16	a) Sealed hide bins for hides b) Sealed tipper trucks for hides c) Sealed tipper truck for fats/grease d) Transport Company and Driver Procedure	LOW - 4
13	Samming	Land	Normal	Increased Hydrocarbons (fats/oils) in chrome sludge cake	a) Disposal issues to Albury Landfill. b) Increased hydrocarbons above 10,000ppm will change the waste classification from a General Solid Waste to a Restricted Solid Waste c) RSW is prohibited at Albury Landfill and a hazardous landfill will be required	HIGH - 16	a) Set control amount of degreaser used on felts for daily cleaning purposes b) Eco-friendly degreaser to be utilized c) Annual Waste Classification Reports to be submitted to Albury City Council for Chrome Cake, Tanned trimmings and contaminated hair.	LOW - 4
14	Drum Processor & Mixer Processing a) Irrigation b) Sludge Injection	Land	Abnormal	Adverse weather Events	a) Wastewater plant overwhelmed with rainwater run-off	HIGH - 16	a) Divert spill containment bund sumps to evaporation pans b) Hold drum, processor and mixer drains until wastewater returns to normal operation	MEDIUM - 8

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PRIORITY	ACTIVITY	ELEMENT	MODE OF OPERATION	ASPECTS	IMPACTS	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD PRIOR CONTROL	CONTROL	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD AFTER CONTROL
					b) Paddocks too wet to irrigate		c) Hold loading drums and drains d) Hold irrigation tanks and fill to top max capacity (900 KL) e) Divert hides if adverse weather continues	
15	Drum Processor & Mixer Processing a) Irrigation	Land	Abnormal	Crops and soil effected by irrigation effluent of pH >11.5	a) Burning of crop leaves, reducing photosynthesis, inhibiting nutrient removal b) Soil alkalinity increase c) Odour issues with irrigation effluent <9.5	HIGH - 16	a) Field pH testing to be restricted to specify 9 – 11.5. b) pH correction in irrigation tanks with either acid dosing to reduce or alkaline dosing to increase. c) Oxidise irrigation for additional 2 hours or overnight, if possible, to correct pH if too high. d) Monthly reports from NATA laboratory to be trending below 9.5 e) Annual soil samples collected from all 20 irrigation sectors and analysed by NATA Lab. f) EPA License g) Annual Performance Summary Report to address any Impacts from increased levels	MEDIUM - 8
16	Samming	Water	Normal	Chrome Wastewater	a) As per processing wastewater containing chrome	HIGH - 12	a) Separate Chrome Treatment Plant. No chrome contaminated effluent discharged to land b) EPA License c) ESOP1.5 – Chrome Effluent Treatment	LOW - 4
17	Drum Processor & Mixer Processing a) Irrigation	Water	Normal	Surface water affected by Non-chrome wastewater, solid waste, BOD, TDS, SS, TKN	a) Possible contamination of surface water	HIGH - 12	a) ESOP1.7 - Pivot Irrigation b) ESOP1.6 - Hardhose Irrigation c) EPA License d) Irrigation Management Plan e) Excess surface pooling to be treated with lime	LOW - 4
18	Drum Processor & Mixer Processing a) Irrigation	Water	Normal	Surface water affected by Chrome wastewater, grease, salinity	a) Possible contamination of surface water	HIGH - 12	a) Separate Chrome Treatment Plant. No chrome contaminated effluent discharged to land	LOW - 4
19	Energy Consumption a) LPG b) Petrol & Diesel	Climate Change	Normal	Air Emissions – CO, CO ₂ , NO _x , SO _x , VOC, Particulates & Temperature	a) Contributes to Global warming b) Burns c) Odour	HIGH - 12	a) Odour extraction through wet scrubber b) Fuels and Oils are stored in bund areas and self-bunded tanks	LOW - 3

EP1.2 – POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

PRIORITY	ACTIVITY	ELEMENT	MODE OF OPERATION	ASPECTS	IMPACTS	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD	CONTROL	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD
						PRIOR CONTROL		AFTER CONTROL
					d) Liquid fuels can contaminate soils and surface waters		c) Change forklift fleet every 3 years to more fuel-efficient models d) Ektimo – Emission Testing	
20	Maintenance (Including contractors)	Climate Change	Normal	Waste oils, solvents, metals, CFC's	a) Oils/solvents could contaminate soils, surface water b) CFCs from refrigeration units could contaminate atmosphere c) Housekeeping	HIGH - 12	a) Fuels and Oils are stored in bunded areas or self- bunded tanks. b) Solvents are stored in fume cabinets c) DG License d) Replace R22 refrigeration gas with environmentally friendly gas	LOW - 3
21	Drum Processing a) Irrigation b) Sludge Injection	Land	Normal	Soils – Chrome waste, grease and salinity through over irrigation	a) De-structuring of soil through salination and acidification	HIGH - 12	a) Separate Chrome Treatment Plant b) Restricted application of effluent to land c) EPA License d) Annual Laboratory testing of Irrigation Effluent, Piezometers and Soil testing e) Annual Performance Summary Report to address any Impacts from increased levels	LOW - 3
22	Drum Processing a) Irrigation b) Sludge Injection	Land Air	Abnormal	Odour	a) Nuisance odour for neighbours	HIGH - 12	a) Avoid unmonitored irrigation on sector 12 on tannery farm and pivot 1 on Buchlyvie farm due to possibility of unmonitored odour that could drift beyond fence line to neighbour's property. b) Sludge injected sub-surface preventing any pooling creating odours.	LOW - 3
23	Plant Operation	Health	Normal	Noise Emissions	a) Health effects for workplace participants b) Nuisance to neighbours	MEDIUM - 9	a) Ear Protection provided b) Employee hearing tests every 2 years after initial testing before starting at GL c) Full factory site noise testing every 5 years d) JTA – Noise Assessment Reports	LOW - 3
24	Fleshing	Waste	Normal	a) Wet waste - BOD, grease, organic matter b) Solid Waste – skulls, pigskins hooves	a) Landfill	MEDIUM - 9	a) ESOP1.1 – Wastewater General Operations b) ESOP1.2 - Waste Disposal c) Micro screening of fleshing's	LOW - 3

EP1.2 – POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

PRIORITY	ACTIVITY	ELEMENT	MODE OF OPERATION	ASPECTS	IMPACTS	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD	CONTROL	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD
						PRIOR CONTROL		AFTER CONTROL
							d) All wet wastes to be treated with lime before disposal to land fill. This in the event the waste can't be sent to the renderers.	
25	Energy Consumption	Climate Change	Normal	Electricity – Air Emissions (at power plant) CO, CO ₂ , NO _x , SO _x , VOC, Particulates	a) Contributes to global warming b) Smog	MEDIUM - 9	a) Utilising energy efficient machinery and equipment b) Turn factory lights off during the day. c) Rapid doors installed on all chillers to maintain a constant temperature d) Reduce gas consumption by utilizing electrical elements in heat exchangers for the tanning drums e) Large Scale 200 KW Solar plant installed to reduce power consumption	LOW - 3
26	Preserving Operation	Air	Normal	a) Odour – Caused by spillage of blood water beyond fence line and or rotten hides received. b) Fat and Grease	a) Health effects for workplace participants b) Odour - Nuisance to neighbours c) Slippery driving conditions	MEDIUM - 9	a) Preserving area surrounded by drains and sump to capture spills b) Tannery surrounded by moat (750 KL) to capture spills in case of sump pump failure c) Housekeeping – working area washed down daily	LOW – 3
27	La Nina	Climate Change	Normal	Heavy Rainfall	a) Flooding b) Pollution Incidents – Surface Run-off onto neighbouring properties	MEDIUM – 9	a) All factory rainwater is collected within the factory moat b) In the event the moat has reached capacity due to heavy rainfall the water can be diverted to an evaporation dam c) Chemical storage areas are bunded and any water that may be contaminated is diverted to the effluent plant for treatment d) Preserving can be performed offsite in event reaching capacity e) Reduce production levels to reduce water usage if required f) Monitor irrigation sectors for drainage, pooling and run-off. g) Large dirt bunds built on Western boundary of tannery farm in sector 12 as well as sector 13 on Buchlyvie farm to prevent any potential surface-	LOW – 3

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PRIORITY	ACTIVITY	ELEMENT	MODE OF OPERATION	ASPECTS	IMPACTS	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD	CONTROL	SIGNIFICANT (S) / NOT SIGNIFICANT (NS): CONSEQUENCE / LIKELIHOOD
						PRIOR CONTROL		AFTER CONTROL
							run offs into water course through low depressions of both farms. h) 300 m bund built along western fence line of Buchlyvie farm in the event of abnormal rainfall and dam filling up. i) Raise NCR for to enact wet weather contingencies	

14. TRAINING

- 14.1. Wastewater and Drum Operators will be provided with spill response training to ensure they can safely clean up and dispose of any chemical spills that may occur.
- 14.2. All workplace participants will be provided with training during the induction on how to report any hazardous spills and complete an Incident Report and Investigation Form. Refresher training will be provided annually to ensure workplace participants are aware of their responsibility to report any emergency hazardous materials and wastewater pollutant spills.
- 14.3. Training records for all workplace participants shall be maintained by the WHS department.
- 14.4. A training needs analysis program is implemented. All training is coordinated by the training officer in conjunction with the department representatives.

15. COMMUNICATING WITH THE LOCAL COMMUNITY

- 15.1. Community residents that are potentially affected by an environmental incident at the GLC will be notified immediately by one of the following methods:
- a) Phone call by the Operations Supervisor or General Manager; or
 - b) Door knocking by the Operations Supervisor or appropriate delegate for face-to-face communication wherever feasible.
- 15.2. Correspondence received by GLC relating to environmental issues will be managed by the General Manager. Advice may be sought from the Technical Manager or from the Maintenance Manager depending upon the complexity of the issue.
- 15.3. Any additional communication will be determined by the nature of the event or as directed by the relevant agency. Regular updates will be provided to the affected community residents and local council throughout the course of the event.
- 15.4. In the event of a major pollution incident, residents or businesses may be further contacted by an emergency service representative, such as in a case where evacuation or critical safety actions are necessary.
- 15.5. A follow up telephone call will also be made to residents when the incident is no longer of concern or normality has been restored.
- 15.6. In the event of an environmental incident, only the General Manager or delegate are authorised to make any statements to the media or public. Workplace participants will be informed to direct all media attention to the General Manager.

16. INFORMATION TO BE TAKEN IN THE EVENT OF A POLLUTION INCIDENT

16.1. The following information (as a minimum) should be included in the initial notification on the **IF14 - Incident and Investigation Report Form**:

- a) The nature of the incident, Time and date of incident;
- b) Location of incident;
- c) Number of persons involved (if any);
- d) Description of injuries (if any);
- e) Number and type of vehicles involved
- f) Name and contact details of the person in charge at the incident site;
- g) Potential hazards;
- h) Dangerous goods.

16.2. **Air Emissions – Offensive Odours:**

- a) Questions to ask the caller in the event of an odour complaint phone call and recorded on **EF02 - Pollution and Odour Complaints Form**;
 - i. Residents name and contact number;
 - ii. How long have you noticed the odour – Duration of the odour;
 - iii. How strong is the odour – Strong, mild or weak;
 - iv. What does the odour smell like – rotten eggs, urine or something else – description of odour;
 - v. Thank you for providing us with the information we will try and rectify the problem immediately; and
 - vi. Our Operations Supervisor or General Manager will be in contact with you shortly.
- b) Geelong Leather Response;
 - i. Record all weather details provided on the Davis Vantage VUE weather station i.e. direction wind is blowing;
 - ii. All details of investigation are to be recorded under section 2.7 on EF02 - Pollution Complaints form;
 - iii. A response will be given to the complainant by the General Manager or Operations Supervisor. This response shall be documented on the EF02 - Pollution and Odour Complaints Form, under section 2.6.

17. VARIATIONS

- 17.1. GLC reserves the right to vary, replace or terminate this Procedure if legislation or other references change or, as a minimum, 3 years from last review date.

18. REFERENCES

- 18.1. IP1.2 - Emergency Response Procedure
- 18.2. IP1.1 – Hydrogen Sulphide Gas Procedure
- 18.3. IP1.11 – Infectious Disease Procedure
- 18.4. ESOP1.3 - Emergency Response to Wastewater Spillage
- 18.5. SSOP1.5 – Chemical Response
- 18.6. SSOP1.19 – GasGard XL Controller
- 18.7. EP1.1 - Emissions to Air and Odour Procedure
- 18.8. EM05 – Environmental Aspects
- 18.9. EM08 – Training, Awareness and Competence
- 18.10. EM09 – Communication
- 18.11. **Additional references from SOP EMS; Wastewater** (Used in conjunction with the PIRMP)
 - a) ESOP1.1 - General Operations
 - b) ESOP1.2 - Waste Disposal
 - c) ESOP1.4 - Non-chrome Effluent Treatment
 - d) ESOP1.5 - Chrome Effluent Treatment
 - e) ESOP1.6 - Hardhose Irrigation
 - f) ESOP1.7 - Pivot Irrigation

19. REFERENCES/OTHER RELEVANT DOCUMENTS

- 19.1. PS11 - WHS Policy Statement
- 19.2. PS03 - Environmental Policy Statement
- 19.3. IR1.3 - Legal and Obligation Register
- 19.4. SR1.1 – Emergency Evacuation Register
- 19.5. SR1.4 - Incident Investigation and Hazard Register
- 19.6. ER1.2 - Pollution and Odour Complaints Register
- 19.8. IF101 – GLC Emergency Management Plan
- 19.7. ISO 45001:2018
- 19.8. ISO 14001:2015

20. PIRMP TESTING RECORDS

NO	DATE	METHOD	WORKPLACE PARTICIPANTS	INCIDENT TYPE
1	09 Mar 2012	Evacuation Drill	All workplace participants	Whole of site Emergency evacuation – Chemical spill and cross-contamination between Alkaline and acidic process chemicals.
2	02 Jul 2013	Scenario Drill	Drum Supervisor, Wastewater Supervisor, Drum Operators, Tanning Drum Operators and Wastewater personnel	Chemical Spill – Hazardous chemical IBC punctured by forklift
3	16 Sep 2014	Evacuation Drill	All workplace participants	Whole of site Emergency evacuation – Bush Fire scenario to test evacuation points around Factory with Fire Wardens.
4	19 Aug 2015	Evacuation Drill	All workplace participants	Whole of site Emergency evacuation – LPG Gas Tanks explosion scenario to test evacuation points around Factory with Fire Wardens.
5	31 Mar 2016	Evacuation Drill	All workplace participants	Gas Leak Drill – CO2 gas leak inside factory
6	17 Mar 2017	Scenario Drill	Drum Supervisor, Drum Operators	Fire Drill - After hour evacuation scenario to Fire in Chemical storage shed.
7	31 Oct 2017	Scenario Drill	Wastewater Department	Chemical Spill Drill - to determine response times to chemical spill within chemical Prodomix area.
8	04 Sep 2018	Evacuation Drill	All workplace participants	Whole of site Emergency evacuation - H2S Gas/ammonia detected on mezzanine after process water draining with main doors open.
9	30 Sep 2018	Desktop Review	QA Co-ordinator, EMS Committee	Desktop review to ensure PIRMP content is valid, referencing to correct updated legislation, Procedures and SOP's. Can be followed in and event of a pollution incident.
10	21 Aug 2019	Evacuation Drill	All workplace participants	Whole of site Emergency evacuation – H2S Gas leak at Drum 3.
11	31 Oct 2019	Scenario Drill	Training Officer, Drum Supervisor, Wastewater Supervisor and Drum Operators	Chemical Spill Drill - Drum/Wastewater Department evacuation – Formic acid spill in chemical Prodomix area.
12	18 Nov 2019	Scenario Drill	All workplace participants	Whole of site Emergency evacuation – H2S Gas leak with victim and testing BA trained personnel responses.
13	7 Feb 2020	Scenario Drill	All workplace participants	Whole of site Emergency evacuation – H2S Gas leak at Processors. Testing new sensor equipment.
14	15 Aug 2020	Desktop Review	Training Officer, EMS Committee	Desktop review to ensure PIRMP content is valid, referencing to correct updated legislation, Procedures and SOP's. Can be followed in and event of a pollution incident.
15	4 Dec 2020	Actual Evacuation (After Hour)	Drum Operators	Gas Leak - Failed Hair screening process due to pipe being replace mid-cycle and carry over of hair float into the pre-deliming stage causing a brief reaction (1 minute) with high pH mixing with low pH.
16	5 May 2021	Scenario Drill	All workplace participants	Whole of site Emergency evacuation – Formic Acid Leak from IBC in receival yard. Testing Fire Warden responses and management of evacuation.

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17	12 Aug 2021	Scenario Drill	All workplace participants	Whole of site Emergency evacuation – False H2S alarm created due to calibration procedure being implemented
18	01 Sept 2021	Scenario Drill	All workplace participants	Simulated LPG gas leak – Partial site evacuation. Testing warden knowledge and response
19	09 Nov 2021	Scenario Drill	Drum Operators	Forklift gas bottle leaking – Test drum operators' knowledge of Procedure and LEL's. Partial Evacuation required.
20	19 Nov 2021	Scenario Drill	Drum Operators	Whole site evacuation – simulated H2S gas leak at processors. Check Drum operators' awareness of afterhours procedure.
21	10 Feb 2022	Actual Evacuation	All workplace participants	H2S alarm was activated during fixed point monitoring calibration - Evacuated departments to huddle zones where department heads conducted head counts.
22	2 Mar 2022	Actual Evacuation	All workplace participants	Whole of site Emergency evacuation: 1. H2S Gas detected at Drum 1 and 2 - value failure allowed cross-contamination of pickle and liming liquor. 2. H2S Gas detected at Processor 1 and 2 – worn seal on acid recirculation pump causing acid leak into non-chrome drains.
23	26 Apr 2022	Actual Evacuation	All Workplace participants	Acid spill at hide processor prep tank caused elevated H2S above 15ppm for 13 seconds and above 10ppm for 45 seconds
24	09 Aug 2022	Scenario Drill	Chief and Deputy Wardens	LPG gas tank leak simulation with chief warden. Further training was undertaken.
25	09 Sept 2022	Scenario Drill	ECO team	Chemical leaking into moat from chem storage shed simulation. Wardens followed redirection and chemical spill procedure
26	06 Oct 2022	Scenario Drill	ECO team	Simulate extreme wet weather in preparation for La Nina. All warden enacted PIRMP and Emergency Preparedness in regard to severe weather
27	14 Nov 2022	Actual Event	Chief Wardens and Management team	Flood incident on 14/11/22 impacting billabong creek and township of Culcairn flood water did not impact facility. Ceased irrigation activities to monitor situation. Monitored information from local emergency services.
28	19 May 2023	Actual Event	EMS Committee	Notified of Surface Run-off event into neighbour's farm. Ceased irrigation activities to monitor situation. Notified EPA. Completed and submitted EF02 – Pollution and Odour Complaints form to EPA 26May23
29	16 Jun 2023	Re-test	EMS Committee	Follow up scenario drill to previous event on 19May23. Critical Inspection points have been identified and established along GL boundary fence line for future monitoring. New bunding along western boundary of Buchlyvie farm working as designed.
30	14 Aug 2023	Actual Evacuation	All Workplace participants	False Alarm due to H2S detection system undergoing routine maintenance

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31	07 Sept 2023	Scenario Drill	ECO Team	Simulated Formic acid spill. All wardens followed PIRMP and emergency procedures
32	03 Mar 2024	Scenario Drill	Deputy Chief Warden and Drum Operators	Simulated H2S incident in conjunction with Culcairn, Henty and Albury Fire Brigades. Deputy Warden was able to work with Fire Brigade teams to mitigate H2S source and locate personnel.
33	13 Jun 2024	Scenario Drill	Chief Warden and Deputy Warden	Simulation LPG leak. PIRMP was followed
34	5 Sept 2024	Scenario Drill	All Workplace Participants	Simulated H2S leak after hours. After hours procedure adhered to and PIRMP
35	16 April 2025	Scenario Drill	Simulated Oil Spill	Simulated oil spill. PIRMP was followed spill contained.
36	30 May 2025	Scenario Drill	H2S Simulation	Simulated H2S leak minor issues however PIRMP followed.
37	29 Sept 2025	Scenario Drill	Chemical Spill Simulation	Simulated Chemical spill PIRMP followed
38	10 Nov 2025	Scenario Drill	Gas Leak Simulation	Simulated LPG leak PIRMP and Procedures followed Some communication issues

21. DOCUMENT HISTORY

VERSION	DATE	SUMMARY OF CHANGES	TRAINING REQUIRED
Rev 0	06 Mar 2012	Initial	Y
Rev 1	18 Sep 2013	Additional references included	N
Rev 2	20 Aug 2015	Updated for EPA requirements	N
Rev 3	08 Jan 2016	Additional references included	N
Rev 4	13 Jan 2017	Updated supporting documents	N
Rev 5	20 Nov 2017	Reviewed and updated	N
Ver 1	30 Sep 2018	Revise formatting, header and footer – Transfer from WHS Procedure to EMS Procedure and review content	N
Ver 2	30 Sep 2019	Reviewed and updated with Buchlyvie farm details, site maps and references included	N
Ver 3	6 Dec 2019	Included definition of pollution incident from environmental guidelines; Included additional image for Environmental Receptors displaying site; contamination moat around the factory, table listing all wastewater pollutants held; in tanks/pits and emergency response for a Hydrogen Sulphide Gas leak	N
Ver 4	15 Apr 2020	Change reference from Plant Manager to General Manager; Change reference from employee/worker to workplace participant. Change document number from EMS20 to EP1.2 for Procedure identification; Update Section 1 – Purpose to reflect PIRMP guidelines; 11.6a – location of H2S equipment; Table in 10.2b diesel storage; Section 16 – IMS references 16.1 to 16.9; Included Section 3 – Standards and Legislation; Section 11 – H2S Gas as its own section; Section 15 – Variations; Reformatted numbering	Y
Ver 5	15 Aug 2020	Reviewed and updated; Section 2, Scope points 2.1 and 2.2; Updated point 5.4 – include monthly testing records; point 6.1 to include EPL Summary table; point 9.3 transferring point form into a table of priority; Updated Section 15 – Communicating with Local Community; Updated Figure 1 – Environmental Incident Response Plan; Included Section 13 – Determining the Significance of Environmental Aspects; Section 20 – PIRMP Testing Results	Y
Ver 5.1	8 Oct 2020	Updated point 7.3a – moat holding capacity; Updated point 10.2e and 10.2f to include chemical handling procedures; Updated point 11.3a – drainage holding capacity; Updated 13.4 Aspects Register, Priority 6 Chemical Storage; Amend 14.1 – Wastewater and Drum operators will be provided with spill response training; Amend 16.2b ii and iii to reference correct sections of EF02 form	N
Ver 5.2	29 Jan 2021	Update table point 11.3 - NC collection tank to 120 KL and Irrigation Tank 3 to 350 KL; Update Section 20 – point 15, gas leak emergency evacuation	N
Ver 5.3	28 May 2021	Update Table 9.4 – Site Contacts and positions; Update Table name point 13.4 – ER1.3 Register of Aspects; Update Table ER1.3 to include Chlorides as a Priority 3 action; Update points 19.3, 19.4, 19.5 to reference the new registers instead of forms; Update section 20 – point 16 – chemical spill drill	N
Ver 5.4	19 Jul 2021	Updated Section 19 for ISO referencing - included points 19.6 and 19.7; Updated Figure 5 – Site map now includes huddle zones	N
Ver 5.5	26 Nov 2021	Updated Sect 7.9c – included heavy rainfall procedure as per EPA email alert 25 Nov 21; NSW EPA Severe weather forecast to February 2022	N

EP1.2 – POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN



		Update Section 13.4, Register of Aspects to include point 27; Updated Section 20 to include recent drills. Updated Figure 2 - Dangerous Goods Depot Site Plan	
Ver 5.6	2 Mar 2022	Updated Section 20 to include recent Actual Evacuations	N
Ver 5.7	7 Oct 2022	Updated Section 20 to include recent evacuations. Reviewed section 13.4 register of aspects for La Nina activities no updates required.	N
Ver 5.8	31 Oct 2022	Update section 13.4 register of aspects La Nina to include wet weather contingencies as response to NCR #417	N
Ver 5.9	16 Nov 2022	Updated Section 20 to include recent evacuations. Annual review PIRMP nil updates required	N
Ver 5.10	31 Mar 2023	Updated section 9.4 – Site Contacts	N
Ver 5.11	16 Jun 2023	Update section 9.4 – Site Contacts. Include Fire Wardens Update section 13.4 – ROA, points 6 and 27 Updated Section 20, Item 28 and 29 to include recent events	Y
Ver 5.12	13 Sep 2023	Updated Figure 2 - Dangerous Goods Depot Site Plan – BOC Tank new location Updated Figure 3 – Drainage Site Plan – P1/P2 floor drain change Updated Figure 5 – Emergency Preparedness Plan – BOC Tank new location Updated Figure 6 – Hydrogen Sulphide Hazard Areas – BOC Tank new location	N
Ver 5.13	20 Nov 2023	Reviewed and updated Section 9 and Section 20	N
Ver 5.14	13 June 2024	Updated section 13.4 - Register of Aspects, Updated Figure 2 to 6 new site plans. Updated section 20 added recent events	N
Ver 6	07 Nov 2024	Updated Image in 7.2.a) Update section 8 to include kangaroo skin processing Updated Section 10.2.a) reflect procedure change Updated Section 12.5.c) to reflect actual contents Updated Section 14.4 to reflect training Process Updated Section 20 added recent events Updated figure 4 and figure 5	N
Ver 6.1	20 Nov 2024	Update Section 11.2 with DG's, depots and quantities. Update Figure 3 - DG Depot Site Plan	N
Ver 7	20 Jan 2025	Update section 7.3 – Sensitive Receptors; Table and Map Updated Figure 2 - Dangerous Goods Depot Site Plan – Splitting Shed Location Updated Figure 3 – Drainage Site Plan – Splitting Shed Location Updated Figure 5 – Emergency Preparedness Plan – Splitting Shed Location Updated Figure 6 – Hydrogen Sulphide Hazard Areas – Splitting Shed Location	N
Ver 8	19 Nov 2025	Reviewed Updated Section 20. Updated Figure 5	N

FIGURE 1: OVERVIEW OF INCIDENT RESPONSE PLAN



FIGURE 2: DANGEROUS GOODS DEPOT SITE PLAN

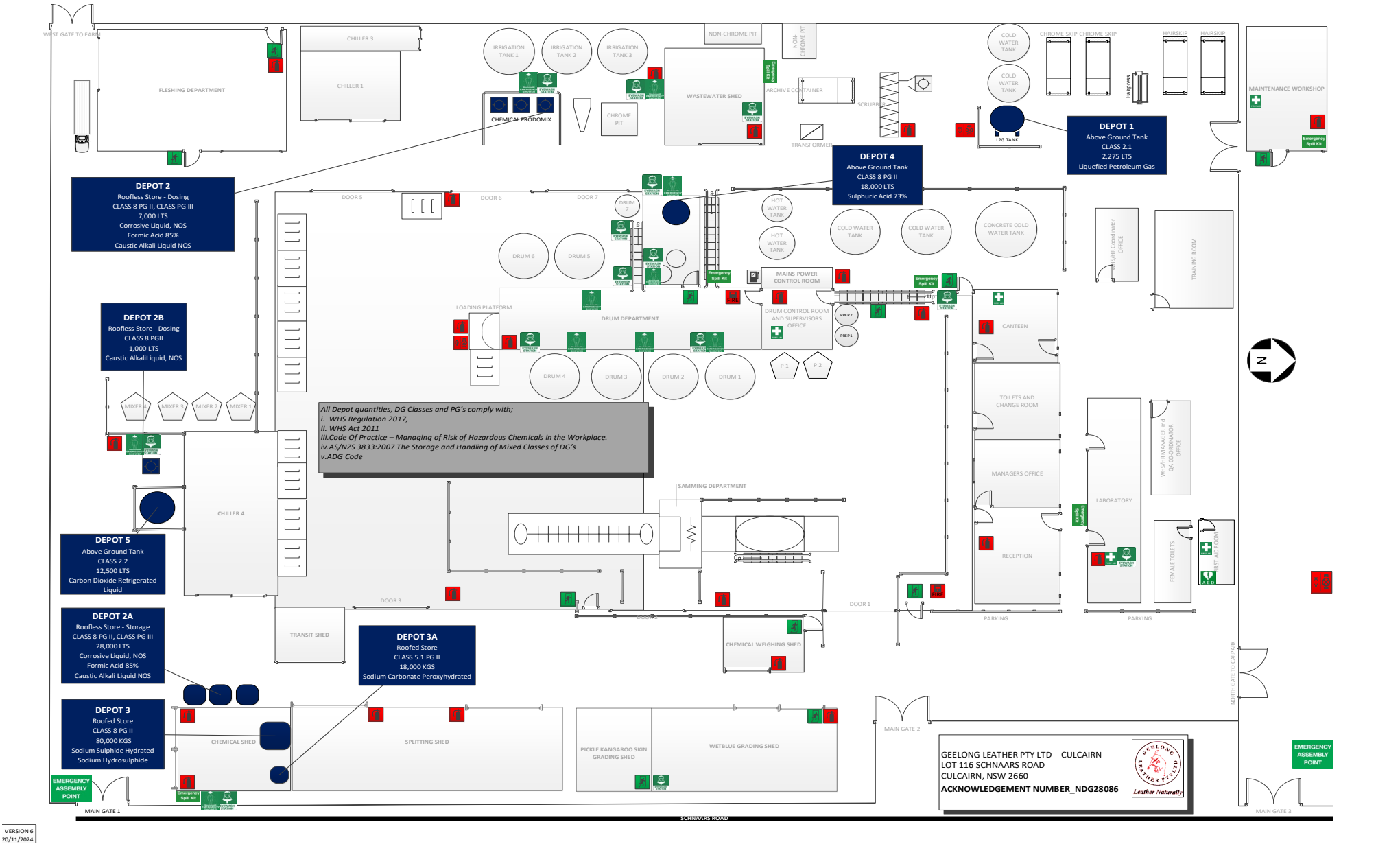


FIGURE 3: DRAINAGE SITE PLAN

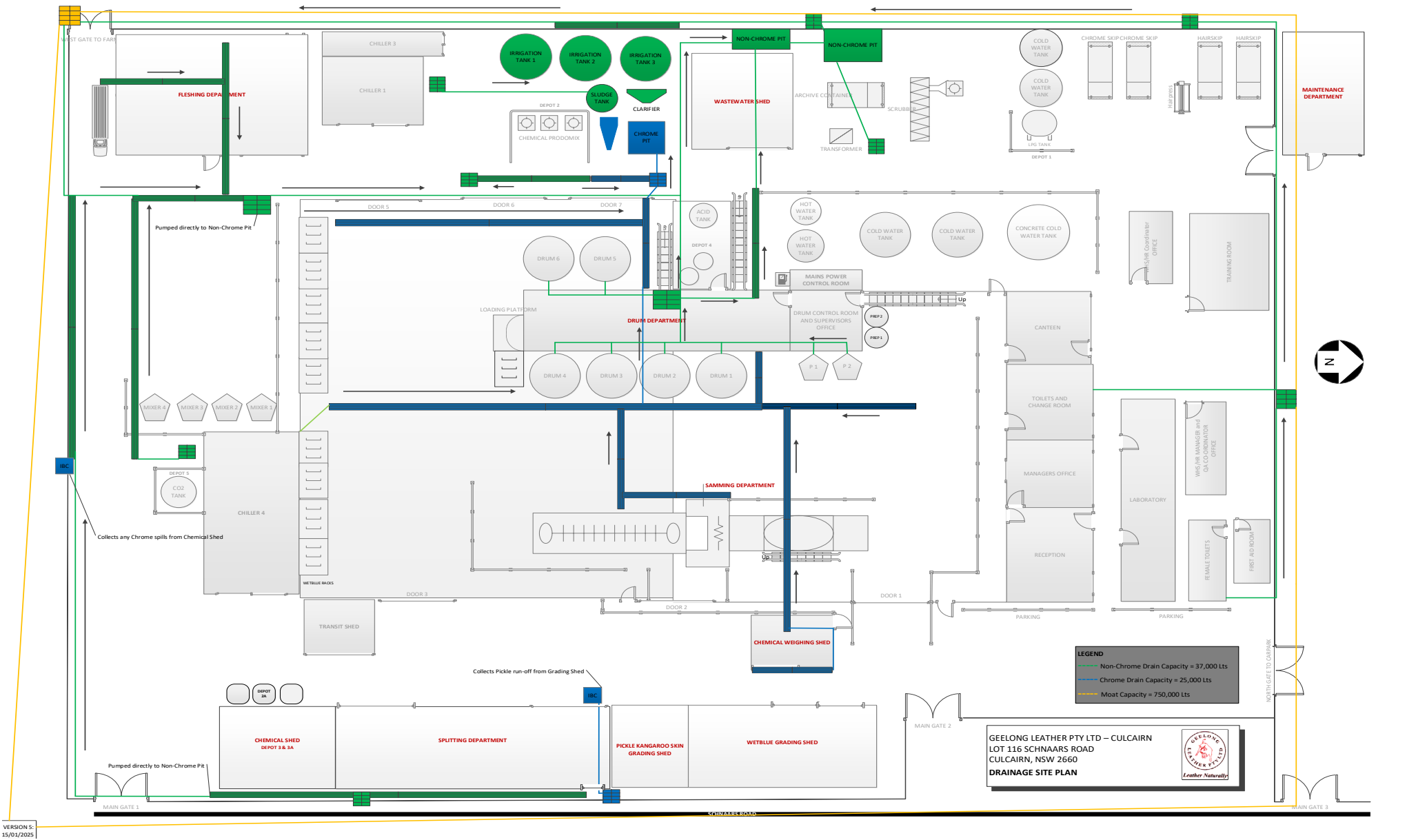


FIGURE 4: WASTEWATER TREATMENT PLANT

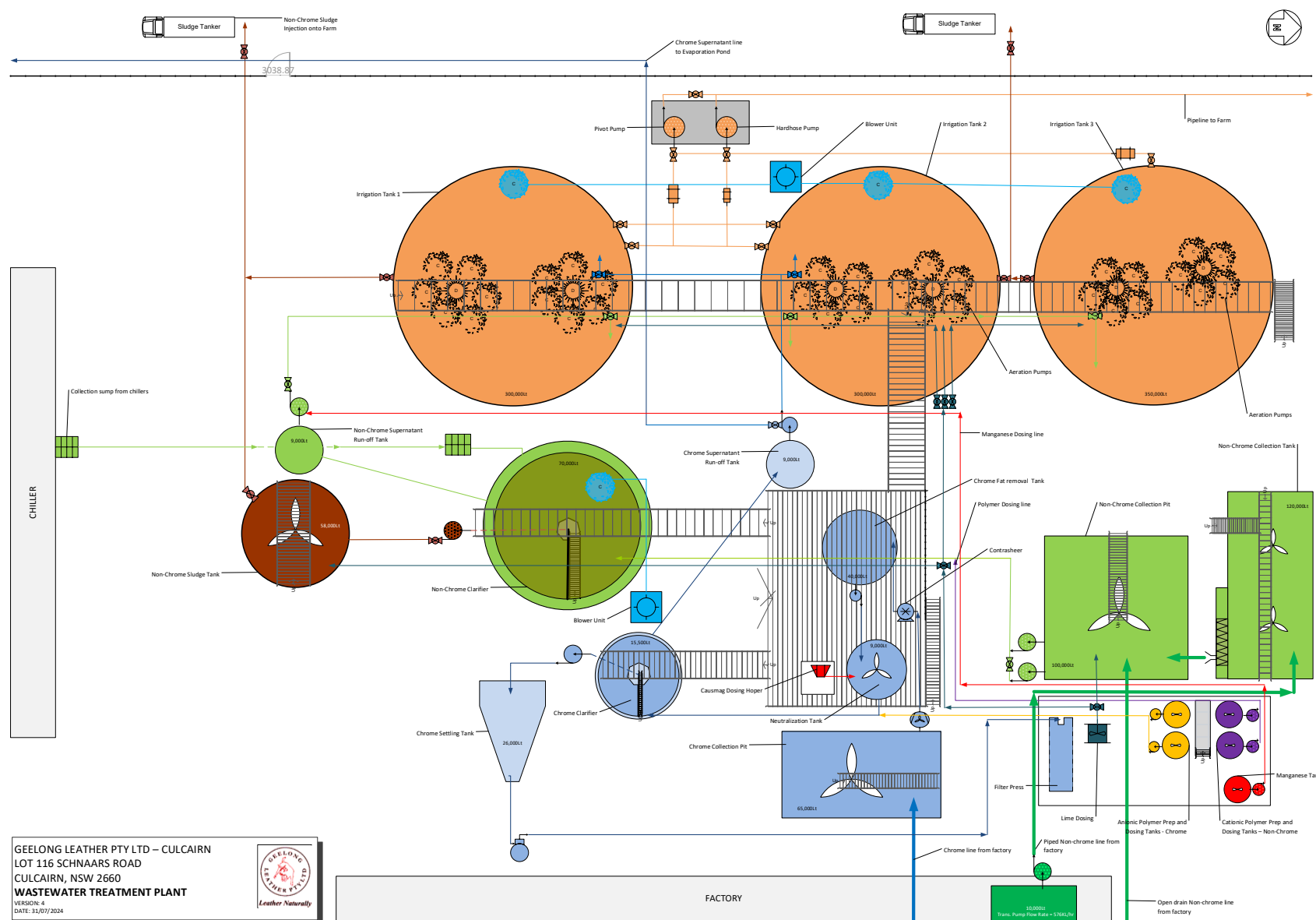


FIGURE 5: EMERGENCY EVACUATION SITE PLAN

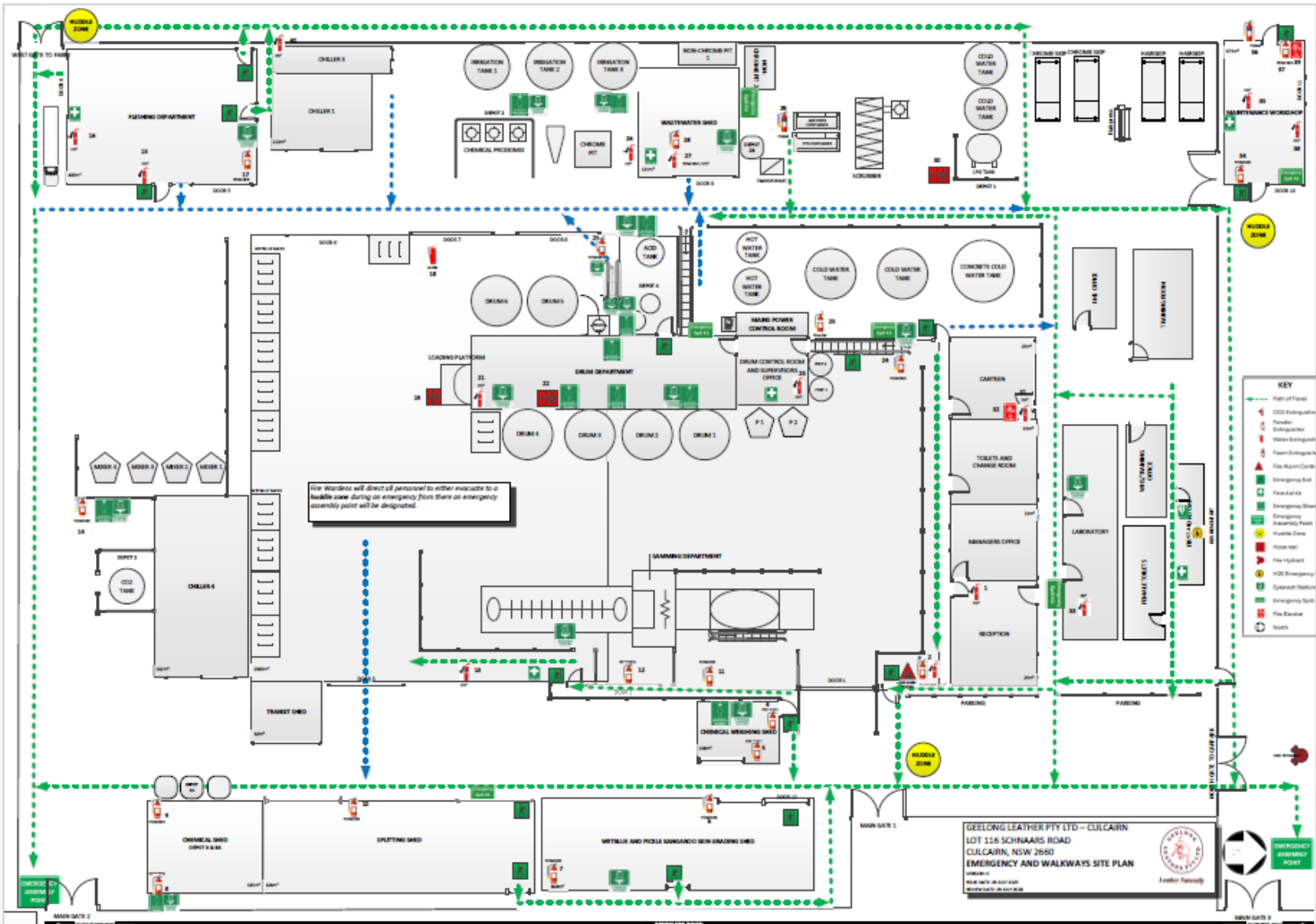


FIGURE 6: HYDROGEN SULPHIDE HAZARD AREAS

