RILTA ENVIRONMENTAL

ENVIRONMENT, HEALTH AND SAFETY

EMERGENCY RESPONSE PLAN

Location:

Unit 14A1 Grants Road, Greenogue Business Park, Rathcoole, Co Dublin

Waste Licence No.: W0185-01

Revision No.	Revision Date:
EHS-ERP-1117	13/11/2017

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Definitions

Emergency Situation

An emergency situation is one that poses a direct or indirect danger to persons or to the environment. This includes but is not limited to the following:

- Fire
- Explosion
- Release of chemical(s) to surface water (drain)
- Release of flammable (or reactive) chemical(s) to sewer
- Spill of large volumes of chemical(s)
- Vehicle-person impact
- Vehicle-vehicle impact
- Excavator turnover
- Flooding (from mains rupture)
- Discovery of body or body part

Relevant Person

A relevant person in the context of this document is a person who has a specific part to play (i.e. coordinate the event, shut off a valve, guide people to a place of safety, etc.) in the response to the emergency situation.

Introduction

The environment, health and safety emergency response plan (EHS-RP) is a document that details

- What to do
- Who does it and
- How to do it

…in an emergency situation.

It is a requirement of the waste licence for the facility that a detailed plan be established, documented and tested (via mock exercises). The plan must be reviewed annually or after testing of the plan and that all relevant persons become familiar with the contents of the plan.

Upon Discovery of an Emergency Situation

Upon discovery of an emergency situation the person must take the following steps:

1. Raise the alarm. This can be done by activating the break-glass units to activate the fire alarm.
2. Evacuate the area (alert those around the person of the situation).

Roles and Responsibilities

Incident Controller

Role

The designated incident controller is the Facility Manager (as of April 2017 this is Mr. Colm Hussey).

The back-up incident controller is the General Manager (as of April 2017 this is Mr. Declan Geoghegan).

Responsibility

- Isolate Facility
  - Close all gas valves (Qty 2) to buildings – see Attachment No.01.
  - Close all valves (Qty 2) to prevent discharge to sewer – see Attachment No.02.
  - Close all doors to buildings (internal and external industrial doors).
  - Prevent all vehicles (except emergency response) from entering the facility.
  - Ensure that the main gate to the facility remains open during the emergency.

- Provide Instruction
  - Instruct designated person to contact the emergency services (Dial 999 or 112).
  - Instruct Fire Marshals to conduct orderly evacuation of the site.
  - Instruct the emergency services on the locations of all on-site hazardous materials/ substances (i.e. danger points) – see Attachment No.08.
  - Instruct First Aiders to provide first aid where required.
  - Instruct Supervisors and Managers to manage traffic outside the facility while staff are at the assembly point.

- Liaise
  - Act as the liaison between the company and the emergency services.
  - Hand over control to the emergency services once they are present on site. Inform the emergency services of the situation and what measures have been taken.
  - Coordinate communications with all neighbouring facilities to ensure that they are aware of the situation and are ready to evacuate if necessary.

Manager/Supervisor (Warehouse Only)

Role

The person currently (as of April 2017) in this role is:

- Mr. Jim Haberlin

Responsibility

- On hearing the alarm:
  - Instruct all persons to evacuate the facility and assemble at the designated assembly point (on footpath outside main entrance gate).
  - Carry out a search of the warehouse areas to ensure there is no one left behind. Closing (NOT locking) all doors as they exit each area.
  - Contact Mr. Colm Hussey (087 917 62 64) or Mr. Declan Geoghegan (087 267 23 75) and inform of the situation.
  - Liaise with the Incident Controller and carry out functions as instructed.

Additional Functions

Mr. Jim Haberlin

- Close the sewer drain close valve (normal position is open) – see Attachment No.02.
- Close the surface water drain valve (normal position is open) – see Attachment No.02.
- Conform that the shutter on the drain in the loading bay is closed (normal position is closed) – see Attachment No.02.

Weighbridge Operator

Role

The person currently (as of April 2017) in this role is:

- Mr. Colm Hussey
- Mr. Declan Geoghegan

Responsibility

- Confirm with the Incident Controller the known locations of hazardous materials/chemicals.
- Provide this list to the Incident Controller.

Fire Marshals

Role

The people currently (as of April 2017) in these roles are:

- Mr. Jim Haberlin
- Mr. Adrian Banut

Responsibility

- On hearing the alarm:
  - Begin evacuating their designated area.
- Make contact with the Incident Controller.
- Carry out roll call at the designated assembly point.
- Instruct all persons to remain at the designated assembly point and NOT to re-enter the building until the all clear is given by the Incident Controller.

First Aiders

Role

The people currently (as of April 2017) in these roles are:

- Helen Ginty
- Tim McMahon
- Shane Moore
- Robert Walsh
- Joseph Stephenson

Responsibility

- On hearing the alarm:
  - Gather the first aid kit (if close by) and proceed to the designated assembly point.
- Where first aid is provided, inform the emergency services/paramedics of any treatment provided.
  - Log all treatment that has been provided to persons.
- If medical assistance is not required, assist the fire Wardens with roll call and crowd control.

Summary Information for General Staff

Upon Hearing the Alarm:

- Leave what you are doing and begin evacuating the building. Do not wait to see if others are evacuating or if it is a false alarm.

  Please note that alarm testing will be notified to all staff in advance of the testing.

- If you are driving a vehicle, park and secure the vehicle so that it will not block the path of a fire engine.
- Your assembly point is on the footpath outside the main entrance gate.
- Remain there until you are instructed otherwise (do NOT re-enter the building).
- Inform the fire marshals at the assembly point if any members of staff are missing.

Emergency Contact Details

Normal Working Hours (08:00 to 17:00)

Contact Person	Contact Number
Rilta 24Hr Emergency Number	01 401 80 00
Incident Controller/Facility Manager – Mr. Colm Hussey	087 917 62 64
Back-up Incident Controller – Mr. Declan Geoghegan	087 267 23 75
Managing Director – Mr. Ronan Sharkey	087 906 3441
Rilta Company Doctor – Dr. Patrick Feeney	01 288 58 51
Emergency Services (Police/Fire/Ambulance/Gardai)	112 or 999
Gardai - Rathcoole	01 666 79 00
Environmental Protection Agency (EPA) - Dublin	01 268 01 00
Environmental Protection Agency (EPA) - Wexford	053 91 60 600
South Dublin County Council (SDCC) – Water Pollution Section	01 414 92 75
ESB	1850 372 999
Inland Fisheries Board Ireland (IFB)	1890 34 74 24

Out-of Hours (17:00 to 08:00)

Contact Person	Contact Number
Rilta 24Hr Emergency Number	01 401 80 00
Incident Controller/Facility Manager – Mr. Colm Hussey	087 917 62 64
Back-up Incident Controller – Mr. Declan Geoghegan	087 267 23 75
Managing Director – Mr. Ronan Sharkey	087 906 3441
Rilta Company Doctor – Dr. Patrick Feeney	01 288 58 51
Emergency Services (Police/Fire/Ambulance/Gardai)	112 or 999
Gardai - Rathcoole	01 666 79 00
Environmental Protection Agency (EPA) - Wexford	053 91 60 600
South Dublin County Council (SDCC) – Water Pollution Section	01 414 92 75
ESB	1850 372 999
Inland Fisheries Board Ireland (IFB)	1890 34 74 24

Incident Notification

Environmental Protection Agency (EPA)

Where there is a significant emergency situation relating to the waste licence or the operation of the facility, the EPA must be notified as soon as possible.

They must be notified as soon as possible by telephone **and** also through the EDEN internet portal:

- Telephone
  - Normal Work Hours – 01 268 01 00
  - Out of Hours – 053 91 60 600
- EPA Website via the EDEN function
  - https://www.edenireland.ie/

Health and Safety Authority (HSA)

An accident/incident resulting in serious injury, death or amputation must be reported to the HSA as soon as possible after the event has occurred.

This is done by logging on to the HSA's website at:

- https://webapps.hsa.ie/Account/Login?ReturnUrl=%2f

South Dublin County Council (SDCC)

Where there is a significant emergency situation involving a release to sewer (surface water discharges to sewer at this facility) SDCC must be notified as soon as possible.

This is done by calling the SDCC Water Pollution section on:

- 01 414 92 75

They may also be emailed on:

- waterpollution@sdublincoco.ie

Gardai

Where there is a significant fire, death, significant injury, amputation or where a person requires an ambulance, the Emergency Service must be notified as soon as possible.

This is done by calling the following numbers:

- Emergency Services (Police/Fire/Ambulance/Gardai)
  - 112 or 999

It may also be necessary to contact the local Gardai in Rathcoole. They can be contacted on:

- 01 666 79 00

Emergency Response Equipment

A variety of emergency response equipment is provided and is available throughout the site.

Personal Protective Equipment (PPE)

PPE is available from the warehouse Office.

They following PPE will be required for managing a significant spill of transformer (non-PBC) oil:

- Safety goggles.
- Disposable coveralls suitable for working with a variety of chemicals (i.e. Lakeland Chemax 3 Coverall).
- Nitrile gauntlet gloves.
- Safety wellingtons.
- High visibility vest.

Due to the nature of the site, there may be contact with PCB oils. Where this is a possibility, the following PPE will be required:

- Full face respirator mask with ABEK Combination Filters.
- Disposable coveralls suitable for working with a variety of chemicals (i.e. Lakeland Chemax 3 Coverall).
- Nitrile gauntlet gloves.
- Safety wellingtons.
- High visibility vest.

Emergency Shower-Eyewash Units

These are useful for the rinsing/flushing of most chemicals from the skin and eyes.

Emergency drench showers (cold water) and attached eyewash flush units (cold water) are available on site. For the locations of these units see Attachment No.06.

For drench showers to be effective, clothing needs to be removed first as the clothing can contain the absorbed chemical resulting in continuing exposure. In times of extreme emergency utilise emergency shower fully clothed. Flushing should continue for 3 to 5 minutes or longer if necessary.

To use the eyewash units that are attached to the emergency shower units, switch on the water and place the eyes in direct contact with the water. Flushing should continue for 3 to 5 minutes or longer if necessary.

Please note that the affected person may be dazed and in shock and will need assistance.

Chemical Spill Kits/Oil Absorbent Stocks

The type of chemical spill that is expected in this location is an oil spill onto a hard (wet or dry) surface. It is because of this that fire retardant oil dry/absorbent granules are used as a means to quickly contain the liquid.

Note the wind direction and stay upwind. If this cannot be done, wear a tight fitting full face respirator combination filter. The respirator and filters are only required where the chemical involved evokes a strong odour or gas.

Oil dry/absorbent granule stocks are available for use throughout the site. For their locations, see Attachment No.05.

The oil dry/absorbent granules are used to absorb the spilled chemical and to prevent it from spreading.

1. Identify the chemical that is involved
2. Put on appropriate PPE
3. Stop the source (if possible) (i.e. turnoff a valve, right a drum, etc.)
4. Contain the leading edge (i.e. where the liquid is flowing) by placing absorbent material approximately 1m ahead of the flowing liquid
5. Protect all vulnerable receptors (i.e. people, drains, etc.) and prevent traffic and people from moving through the spill
6. Clean up and dispose of the material in an appropriate manner

First Aid Kits

There are a number of first aiders located throughout the site. They are trained as QQI Level 5 occupational first aiders.

First aid kits are available on site. For their locations, see Attachment No.06.

Fire Hydrants

There are a number of fire hydrants (Qty 2) located throughout the site. These are part of the mains water system. For their locations, see Attachment No.04.

There are hoses and connections located in a red, fence mounted unit in the main yard.

During an emergency it is likely that the fire service will need to access these units. These areas must be kept clear at all times. Until the fire services arrive, the fire hydrants may be used to cool containers, vehicles or buildings (i.e. to help stop fire spreading or containers/vehicles from exploding or catching fire).

Water and electricity do not mix, use caution when directing water spray.

Mains water will be under pressure, use caution when using the fire hoses.

Site Containment

Gas Valves

It may be necessary to stop the flow of gas to the site. This is done by closing the gas valves (Qty 1 outside, Qty 1 inside at base of office stairs in entrance hall) that are located throughout the site. For their locations see Attachment No.01.

Sewer and Surface Water Isolation Valves

The sewer and surface water drainage lines are interconnected on this site. They join and merge into the sewer line and then once joined exit the site at the main entrance, where it then joins the business park sewer line.

It may be necessary to stop liquid (non-domestic) from discharging to main sewer from these drainage lines. There are a number of drain gate valves (Qty 4) that are used to seal the drains and prevent liquid from leaving the site via this pipe network. For their locations see Attachment No.02.

These drain gate valves are closed by pressing one of two sets of emergency stop buttons. These buttons are located inside and outside of the buildings. Both sets of buttons do the same thing. One set is located in the 'Comms Room', inside on the ground floor of the office block. The second set is located on the wall of the warehouse building, right hand side of the roller shutter door that leads into the yard.

Both sets of buttons are emergency stop only. These drain closure valves can only be reset (i.e. opened again to allow liquid to flow) by going into the manhole that the valve in question is in and re-opening the valve via the hand-wheel or the flip switch on the unit.

The valve that drains the delivery dock area in the yard is a manual close valve and works by sliding a flat gate into place. There is no emergency stop button for this unit.

The valve that stops liquid from the main yard being pumped to sewer is marked as 'YARD VALVE' on the emergency stop control panels.

The valve that stops liquid from the underground attenuation tank (under the car parking spaces at the front of the site) and the drainage from the car parking areas being pumped to sewer, is marked as 'SURFACE VALVE' on the emergency stop control panels.

The section marked 'VALVE 3' on the control panel controls a pumping station (in the car parking area at the front of the site) that used to pump liquid from the floor of the warehouse (during the Cara Environmental days) to sewer. This is no longer in use and is powered off in the manhole that the pumping station sits in.

The valves may only be opened with the **express permission of the Facility Manager**. The decision to open the valves that release liquid to sewer will be based upon the level of contaminants in the contained fire water or spilled chemical.

Please note that the contents of the drainage system and the associated sumps/interceptors/silt traps may need to be emptied via tanker and sent for treatment/disposal at an authorised treatment facility.

Product and Waste Material Inventory

The facility deals primarily with the safe bagging and storage of flue gas residue & boiler ash (waste residue), decommissioning and disposal of transformers which contain oil. As a result of this, the only significant volumes of liquid chemicals on site are transformer and heavy fuel oils. The only significant volumes of solid/powder chemicals on site is waste residue.

See Attachment No.08 for their storage locations.

Firewater

Firewater may be generated on site. This may be as the result of the water or foam used by the emergency services or the in-house emergency teams. This water may become contaminated with any of the chemicals that are on site. As a result, it must be contained during the event and appropriately treated after the event.

Containment

Firewater generated on site can be contained in the loading bay dock area within the main yard. This is an area lower than the main yard and is at an incline which will assist in directing liquid towards it. This is bund tested (every three years, last tested in 2016) and confirmed to hold liquid.

Firewater may also be contained in the storage tanks that are located under Storage Bay 1, Storage Bay 2 and Storage Bay 3.

It may also be suitable to utilise the Rilta fleet of tankers to contain firewater generated on-site or to utilise them to maintain safe levels within the loading bay dock area or the underground tanks under Bay 1, 2 and 3.

Disposal

The firewater liquid must be safely disposed of. Its disposal location must be agreed in advance with the environmental protection agency (EPA).

It must be noted here that after a significant emergency, the site may not be capable of carrying out any treatment process and all firewater generated on-site may need to be transported to another treatment facility. Use of such a treatment facility must be agreed in advance with the EPA.

Training and Mock Exercise(s)

All relevant persons must be trained so that they are familiar with the overall plan and their role within this plan.

This training must take place at least once per year.

Mock exercises are used to determine the effectiveness of the plan and to identify what needs to be changed so as to make it a more robust and effective plan.

Mock exercises must take place at least once per year.

Fighting Fires

Fires may only be tackled by in-house personnel, during the early stages of the fire. Portable fire extinguishers will be used to fight the fire. These have a limited capacity and will last no longer than 2 minutes per unit.

Once the fire has taken hold, no further fire fighting by in-house staff should take place. The emergency services must deal with the fire from this point onwards.

1. Use a fire extinguisher only if you are trained to do so
2. Foam should not be used on live electrical equipment
3. Pull the pin on the handle of the extinguisher
4. Aim the hose of the extinguisher at the BASE of the fire
5. Press the handle and spray from side to side

Only fight the fire with your back to the exit. This is so that you can easily escape, away from the fire.

Stay up-wind of the fire.

Be aware of your surroundings (i.e. what can harm you in the immediate area).

Clean-up after Emergency Events

Once the emergency event is over and the hazardous situation has been contained, a clean-up process must be initiated. Hazardous material (solids, liquids or dusts) produced as a result of the containment process or resulting from an actual release must be contained. Please note that appropriate PPE will be required. The type and quantity of which, will be dependent on the properties (e.g. corrosive, flammable, etc) of the hazardous material. As a minimum, anti-static footwear (boots or wellingtons), safety glasses/goggles, disposable coveralls and nitrile gloves (preferably long arm) are required.

When any potential explosion risk has been mitigated, a Rilta site services team will be employed to clean up significant spills.

Solids – Using an anti-sparking shovel and brush clean the area and place the solids into a suitable container. Seal the container, label accordingly and secure for safe disposal. The area may need to be washed down afterwards to remove residue. This wash-down liquid may also need to be contained for safe disposal.

Liquids – Utilise the tanker system to vacuum up large volumes of free liquid – if liquid is flammable, an earthing system may be required for the tanker, hosing, etc. Deliver to authorised treatment facility for safe disposal. For small volume liquids, use spill containment pads to soak the liquid. Place the pads into an appropriate container. Seal the container, label accordingly and secure for safe disposal.

Dusts – Dusts can become airborne easily. Dampen area with a light misting of water (not jet of water as this will make the dust airborne) and contain as for solids. For large volumes, treat as liquid (noting that filtration of liquid may be required). Deliver to authorised treatment facility for safe disposal.

Scenarios

Scenario No.01 – Fire

Expected Effects

Office Block

- Electrical fire.
- Equipment overheating (i.e. kitchen equipment, under desk heaters, etc.).
- Room contents catch fire.
- Heavy smoke generated.
- Fire spreads due to open doors/doors not correctly sealing with door frame.
- Gas main ignites rupturing gas line, potential for explosion.

Warehouse

- Fire from use of angle grinder.
- Electrical fire.
- Equipment overheating.
- Waste residue or debris is released and catches fire/explodes.
- Fire spreads.
- Dense smoke generated.

Storage Bay 1, Storage Bay 2, Storage Bay 3

- Electrical fire.
- Debris catches fire.
- IBC's/other containers and packaging catch fire igniting adjacent IBC's/packaging.
- Dense smoke generated.
- Intense heat generated due to confined space. Heat ignites adjacent storage buildings, potential for explosion.

Large Yard Shed

- Electrical fire.
- Debris catches fire.
- IBC's/other containers and packaging catch fire igniting adjacent IBC's/packaging.
- Dense smoke generated.
- Intense heat generated due to confined space. Heat ignites adjacent storage buildings, potential for explosion.

Yard

- Vehicle engine overheating.
- Vehicle engulfed in fire.
- Dense smoke generated.
- Fuel tank explodes spreading fire to warehouse and storage buildings.
- Vehicle load is released, crashing to ground.

During this Emergency Situation

- Activate fire alarm and evacuate site.
- Confirm that emergency services have been contacted.
- Fight fire if in early stages (i.e. if a fire extinguisher can extinguish it).
- Shut down all valves to sewer and surface water (see Attachment No.02).
- Shut down all gas valves (see Attachment No.01).
- Contact the adjacent neighbouring properties and alert them to prepare for evacuation.
- Contact the relevant external agencies (see Emergency Contacts Details section).

Scenario No.02 – PCB Oil Contamination (Person/Equipment/Structures)

Expected Effects

Warehouse, Storage Bay 1, Storage Bay 2, Storage Bay 3, Large Yard Shed, Yard

- Release of PCB contaminated oil onto person. Chemical contamination of skin, eyes and clothing.
- Release of PCB contaminated oil onto equipment.
- Slippy equipment/difficult to hold.
- Release of PCB contaminated oil onto structures (including floor surfaces).
- Slippy surfaces.

During this Emergency Situation

- Move offending structure (i.e. transformer/IBC) to a bunded unit.
- If necessary, shut down all valves to sewer and surface water (see Attachment No.02).
- Decontaminate equipment and structures. Water/other fluid use to clean the area must be treated as PCB contaminated waste.
- Test surfaces for traces of PCB contamination and confirm that they are now free of PCB contamination.
- Decontaminate person, remove clothing/section of clothing from exposed person(s) and begin thorough washing of the exposed area.
- Access medical attention for exposed person(s).
- Contact the relevant external agencies (see Emergency Contacts Details section).

Scenario No.03 – Oil Spill/IBC Rupture

Expected Effects

Office Block

- With sewer line closed, toilets may back up.

Warehouse

- Oily liquid released onto ground.
- Oil mist may be generated.
- Potential for a flammable atmosphere to exist as the oil spreads on the ground.
- Slip hazard.
- Contamination of equipment.
- Slippy equipment/difficult to hold.

Storage Bay 1, Bay 2, Bay 3

- Oily liquid released onto ground.
- Oil mist may be generated.
- Potential for a flammable atmosphere to exist as the oil spreads on the ground.
- Slip hazard.
- Contamination of equipment.
- Slippy equipment/difficult to hold.
- Oil drains into under floor sump.

Large Yard Shed

- Oily liquid released onto ground.
- Oil mist may be generated.
- Potential for a flammable atmosphere to exist as the oil spreads on the ground.
- Slip hazard.
- Contamination of equipment.
- Slippy equipment/difficult to hold.
- Oil leaking into yard and potentially to drainage system.

During this Emergency Situation

- Direct the containment of the oil utilising the oil dry/absorbent granules.
- Shut down all valves to sewer and surface water (see Attachment No.02).
- Partial or full evacuation of the site may be required.
- If necessary, confirm that emergency services have been contacted.
- If necessary, fight fire if in early stages (i.e. if a fire extinguisher can extinguish it).
- If necessary, contact the adjacent neighbouring properties and alert them to prepare for evacuation.
- If necessary, contact the relevant external agencies (see Emergency Contacts Details section).

Scenario No.04 – Crane Turnover

Expected Effects

Office Block

- Demolition of part of building, including shattering of windows.
- Demolition of adjacent property/part of property.

Warehouse

- Demolition of part of building, including shattering of windows.
- Demolition of adjacent property/part of property.

Storage Bay 1

- Demolition of part of building, including shattering of windows.
- Demolition of adjacent property/part of property.

Storage Bay 2

- Demolition of part of building, including shattering of windows.
- Demolition of adjacent property/part of property.

Storage Bay 3

- Demolition of part of building, including shattering of windows.
- Demolition of adjacent property/part of property.

Large Yard Shed

- Demolition of part of building, including shattering of windows.
- Demolition of adjacent property/part of property.

Yard

- Crushing/ severe injury of persons.
- Crushing of equipment.
- Blocking of entrance/exits.
- Demolition of part of building, including shattering of windows.
- Transformer oil spill.
- Crane fuel (diesel/petrol) spill.
- Demolition of adjacent property/part of property.

During this Emergency Situation

- Contact the emergency services (i.e. ambulance and fire brigade).
- Contact the in-house occupational first aiders and request their assistance.
- Request from the emergency service operator, details of what first aid can be applied until the arrival of the ambulance.
- Partial or full closure of the site may be required.
- Oil/fuel containment may be required – utilise stocks of oil dry/absorbent granules.
- Contact the relevant external agencies (see Emergency Contacts Details section) and provide details of the situation.

Scenario No.05 – Vehicle Impact (Vehicle-Vehicle/Vehicle-Person)

Expected Effects

Office Block

- None expected.

Warehouse

- Injury (bruises, cuts, muscle/ligament/joint damage, crush, amputation,) to person.
- Death(s).
- Damage to property/vehicle.
- Oil leak (transformers/IBC's).
- Vehicle fuel leak.
- Equipment fall from height.
- Containers fall from height.
- Collapse of racking.

Storage Bay 1, Bay 2, Bay 3, Large Yard Shed

- Injury (bruises, cuts, muscle/ligament/joint damage, crush, amputation,) to person.
- Death(s).
- Damage to property/vehicle.
- Oil leak (transformers/IBC's).
- Vehicle fuel leak.
- Equipment fall from height.
- Containers fall from height.
- Collapse of racking.

Yard

- Injury (bruises, cuts, muscle/ligament/joint damage, crush, amputation,) to person.
- Death(s).
- Damage to property/vehicle.
- Oil leak (transformers/IBC's).
- Vehicle fuel leak.
- Equipment fall from height.
- Containers fall from height.

During this Emergency Situation

- Confirm if medical assistance from paramedics is required.
- Contact the emergency services (i.e. ambulance, fire brigade, Gardaí).
- Contact the in-house occupational first aiders and request their assistance.
- Request from the emergency service operator, details of what first aid can be applied until the arrival of the ambulance.
- Oil/fuel containment may be required – utilise stocks of oil dry/absorbent granules. Fire hazard may exist.
- May need to secure any at height equipment or racking that was impacted.
- Partial or full closure of the site may be required.
- Contact the relevant external agencies (see Emergency Contacts Details section) and provide details of the situation.

Scenario No.06 – Bagging Plant Waste Residue* Leak

*Waste Residue: Flue Gas Residue & Boiler Ash

Expected Effects

Office Block

- Flammable/explosive atmosphere may exist however doors are expected to keep out the waste residue.
- In areas closest to the release, potential fire/explosion if switches are switched on/off.

Warehouse

- Compressor (which generates compressed air for the bagging plant) may explode causing damage to the storage silos or their associated pipework resulting in release of ash which may in turn create an explosive atmosphere (similar to baking flour explosions).
- Flammable/explosive atmosphere may exist.
- Fire/explosion if switches are switched on/off or if sources of ignition are introduced into the area (e.g. forklifts, static electricity).

Storage Bay 1, Bay 2, Bay 3, Large Yard Shed

- Possible debris impacts from any explosion.

Front Car Parking Area

- Possible debris impacts from any explosion.

During this Emergency Situation

- Immediately dampen the area(s)with a fine water mist and contain this contaminated water.
- Shut down all valves to sewer and surface water (see Attachment No.02).
- Shut down all gas valves (see Attachment No.01).
- If needed, activate fire alarm and evacuate site.
- Confirm if the emergency services are required.
- Contact the emergency services (if required).
- Fight areas of small fires if in early stages (i.e. if a fire extinguisher can extinguish it).
- Contact the adjacent neighbouring properties and alert them to prepare for evacuation.
- Contact the relevant external agencies (see Emergency Contacts Details section).
- When any potential explosion risk has been mitigated, a Rilta site services team (including industrial vacuum tankers) will be employed to clean up significant spills.

Scenario No.07 – Leak from Stored FIBCs Containing Waste Residue*

*Waste Residue: Flue Gas Residue & Boiler Ash

Expected Effects

Office Block

- Flammable/explosive atmosphere may exist however doors are expected to keep out the waste residue.
- In areas closest to the release, possible fire/explosion if switches are switched on/off.

Warehouse

- Puncture of FIBC bags may result in release of waste residue which may create a flammable/explosive atmosphere.
- In areas closest to the release, fire/explosion if switches are switched on/off.

Storage Bay 1, Bay 2, Bay 3, Large Yard Shed

- Possible debris impacts from any explosion.

Front Car Parking Area

- Possible debris impacts from any explosion.

During this Emergency Situation

- Immediately dampen the area(s)with a fine water mist and contain this contaminated water.
- Shut down all valves to sewer and surface water (see Attachment No.02).
- Shut down all gas valves (see Attachment No.01).
- If needed, activate fire alarm and evacuate site.
- Confirm if the emergency services are required.
- Contact the emergency services (if required).
- Fight areas of small fires if in early stages (i.e. if a fire extinguisher can extinguish it).
- Contact the adjacent neighbouring properties and alert them to prepare for evacuation.
- Contact the relevant external agencies (see Emergency Contacts Details section).
- When any potential explosion risk has been mitigated, a Rilta site services team (including industrial vacuum tankers) will be employed to clean up significant spills.

Scenario No.08 – Collapse of Racking Containing Waste Residue*

*Waste Residue: Flue Gas Residue & Boiler Ash

Expected Effects

Office Block

- Flammable/explosive atmosphere may exist however doors are expected to keep out the waste residue.
- In areas closest to the release, possible fire/explosion if switches are switched on/off.

Warehouse

- Collapse of racking resulting in FIBC bags falling onto the ground. Such falls may release waste residues which may in turn create an explosive atmosphere (similar to baking flour explosions). One section of racking collapsing may instigate a domino effect on all other racking, resulting in the release of large volumes of waste residue.
- Flammable/explosive atmosphere may exist.
- Fire/explosion if switches are switched on/off or if sources of ignition are introduced into the area (e.g. forklifts, static electricity).

Storage Bay 1, Bay 2, Bay 3, Large Yard Shed

- Possible debris impacts from any explosion.

Front Car Parking Area

- Possible debris impacts from any explosion.

During this Emergency Situation

- Immediately dampen the area(s) with a fine water mist and contain this contaminated water.
- Shut down all valves to sewer and surface water (see Attachment No.02).
- Shut down all gas valves (see Attachment No.01).
- If needed, activate fire alarm and evacuate site.
- Confirm if the emergency services are required.
- Contact the emergency services (if required).
- Fight areas of small fires if in early stages (i.e. if a fire extinguisher can extinguish it).
- Contact the adjacent neighbouring properties and alert them to prepare for evacuation.
- Contact the relevant external agencies (see Emergency Contacts Details section).
- When any potential explosion risk has been mitigated, a Rilta site services team (including industrial vacuum tankers) will be employed to clean up significant spills.

Scenario No.09 – Failure of Earthing and Bonding Systems

*Waste Residue: Flue Gas Residue & Boiler Ash

Expected Effects

Office Block

- Flammable/explosive atmosphere may exist however doors are expected to keep out the waste residue.
- In areas closest to the release, possible fire/explosion if switches are switched on/off.

Warehouse

- Failure of earthing or bonding system resulting in build-up of static charges and the ignition of the waste residue* within the silo, tankers or FIBC bags. Followed by explosion(s) and subsequent fires.
- Flammable/explosive atmosphere may exist where waste residue is released.
- Fire/explosion if switches are switched on/off or if sources of ignition are introduced into the area (e.g. forklifts, static electricity).

Storage Bay 1, Bay 2, Bay 3, Large Yard Shed

- Possible debris impacts from any explosion.

Front Car Parking Area

- Possible debris impacts from any explosion.

During this Emergency Situation

- Immediately dampen the area(s)with a fine water mist and contain this contaminated water.
- Shut down all valves to sewer and surface water (see Attachment No.02).
- Shut down all gas valves (see Attachment No.01).
- If needed, activate fire alarm and evacuate site.
- Confirm if the emergency services are required.
- Contact the emergency services (if required).
- Fight areas of small fires if in early stages (i.e. if a fire extinguisher can extinguish it).
- Contact the adjacent neighbouring properties and alert them to prepare for evacuation.
- Contact the relevant external agencies (see Emergency Contacts Details section).
- When any potential explosion risk has been mitigated, a Rilta site services team (including industrial vacuum tankers) will be employed to clean up significant spills.

Scenario No.10 – Release of Waste Residue During FIBC Loading for Export

*Waste Residue: Flue Gas Residue & Boiler Ash

Expected Effects

Office Block

- None expected.

Warehouse

- FIBC falls from forklift/ forklift tears a hole in the FIBC at loading bay.
- Waste residue released, possibility of a localised explosive atmosphere, not expected to linger.
- Waste residue may migrate off site to adjacent neighbouring facilities.

Storage Bay 1, Bay 2, Bay 3, Large Yard Shed

- Waste residue deposition in bays, shed and yard areas.
- No explosion or fire risk expected (extreme sunny day may be the exception).
- Waste residue may migrate off site to adjacent neighbouring facilities.

Front Car Parking Area

- Waste residue deposition in car parking area and on vehicles
- No explosion or fire risk expected.
- Waste residue may migrate off site to adjacent neighbouring facilities.

During this Emergency Situation

- Remove personnel from the affected area.
- Immediately dampen the area(s) with a fine water mist and contain this contaminated water.
- Shut down all valves to sewer and surface water (see Attachment No.02).
- Determine if the emergency services are required.
- Contact the emergency services if necessary.
- Contact the adjacent neighbouring properties and alert them that there may be waste residue released (wind dependant).
- Contact the relevant external agencies (see Emergency Contacts Details section).
- When any potential explosion risk has been mitigated, a Rilta site services team (including industrial vacuum tankers) will be employed to clean up significant spills.

Scenario No.11 – Natural Gas Leak

Expected Effects

Office Block

- Flammable/explosive atmosphere may exist.
- Fire/explosion when switches are switched on/off.
- Possibility of asphyxiation/unconsciousness in confined spaces or in upper areas of the building (e.g. top of stairwell).
- Natural gas (methane) is lighter than air and is expected to rise.

Warehouse

- Warehouse is not gas heated however possibility exists that leaking gas may make its way to the warehouse location or become trapped in the hallway leading to the warehouse.

Storage Bay 1, Bay 2, Bay 3, Large Yard Shed

- None-expected.

Front Car Parking Area

- Leaking gas may be ignited by passing/parked vehicle (e.g. hot exhaust/engine).
- Natural gas (methane) is lighter than air and is expected to rise and be diluted in open air.

During this Emergency Situation

- Shut down all gas valves (see Attachment No.01).
- Ventilate the area(s).
- Activate fire alarm and evacuate site.
- Confirm that the emergency services are required.
- Contact the emergency services.
- Fight fire if in early stages (i.e. if a fire extinguisher can extinguish it).
- Shut down all valves to sewer and surface water (see Attachment No.02).
- Contact the adjacent neighbouring properties and alert them to prepare for evacuation.
- Contact the relevant external agencies (see Emergency Contacts Details section).

Scenario No.12 – Waste Rejection – PCB Contaminated

Expected Effects

Office Block

- None expected.

Warehouse

- Waste which is discovered to contain PCB oils will be quarantined within the warehouse floor – away from all drains.
- All such units will be marked to identify them as PCB contaminated waste.
- Such areas will be deemed off limits to all unauthorised personnel.
- Specialist PCB decontamination unit is available through the Rilta Environmental Contracts Division.

Storage Bay 1, Bay 2, Bay 3, Large Yard Shed

- None-expected.

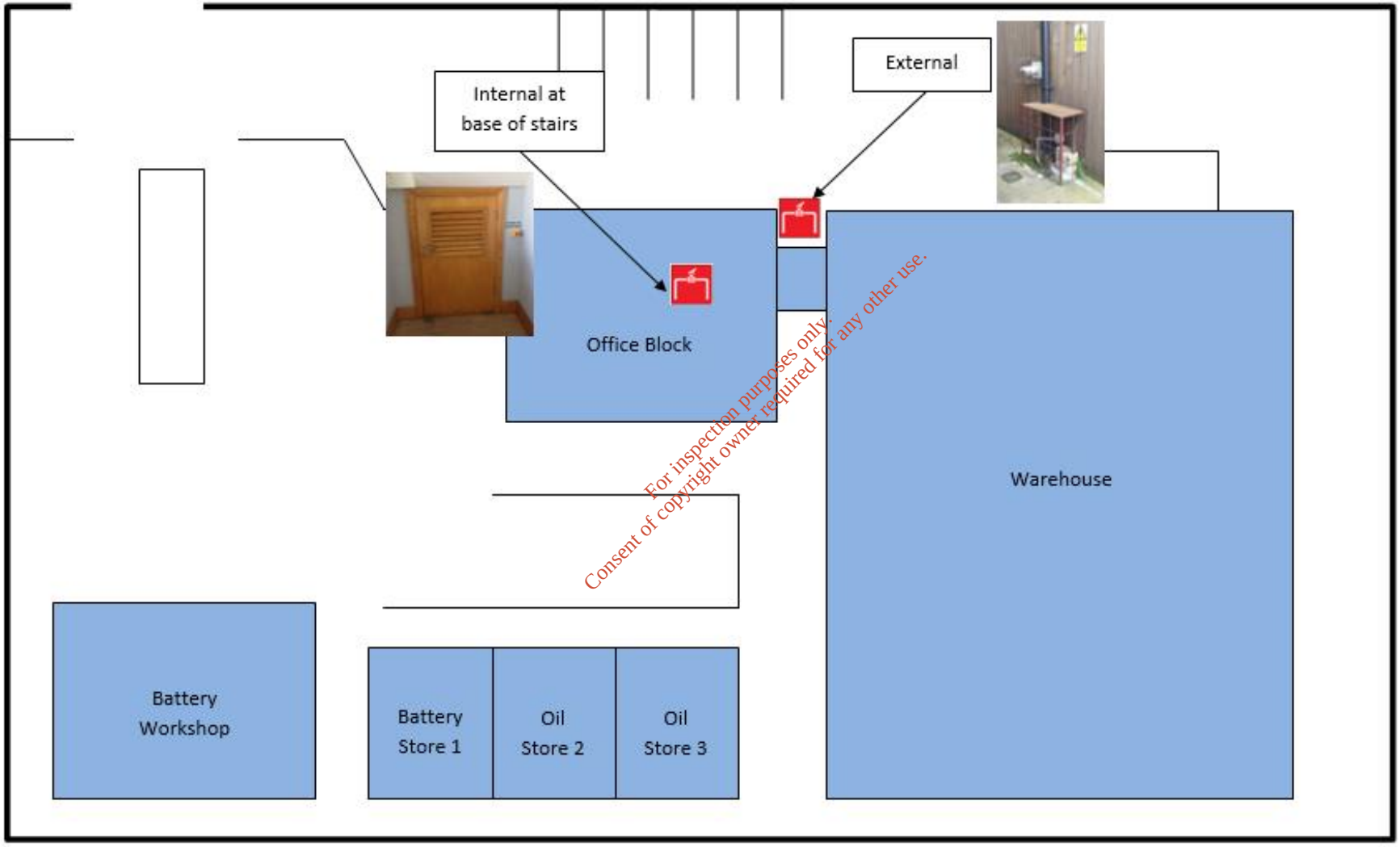
Front Car Parking Area

- None expected.

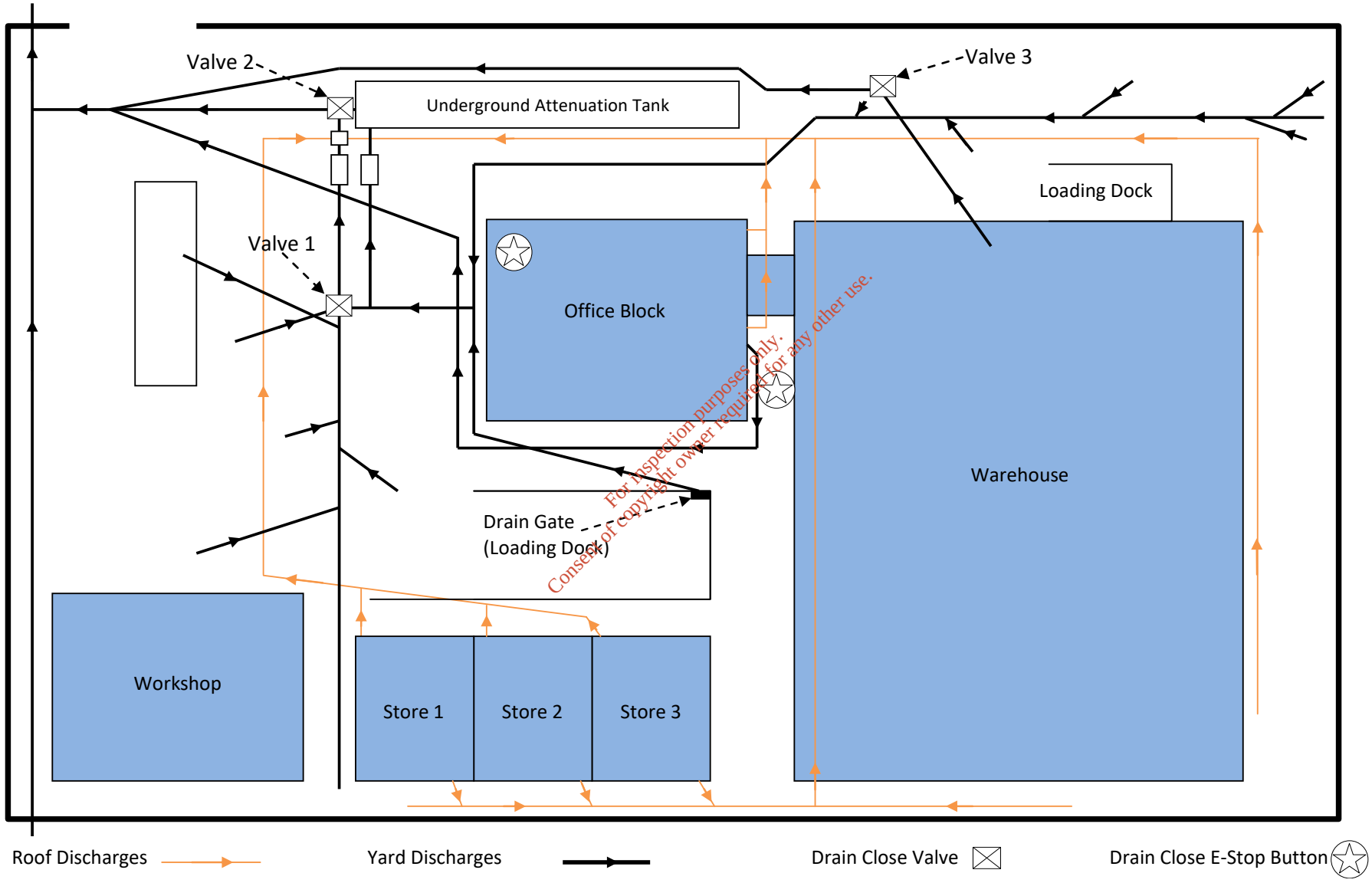
During this Situation

- Secure the units in a defined area.
- Label each unit as PCB contaminated material.
- No access to unauthorised persons.
- Ventilate the area(s).
- Contact the Rilta Environmental Specialist PCB Decontamination Unit via Contracts Division.
- Arrange cleaning via the decontamination unit, if required.
- Utilise full PPE (oil resistant disposable coveralls, full face respirator with combination filters, oil resistant gloves, safety wellingtons).
- Utilise chemical spill kit stocks, if required – don PPE first.

Attachment No.01 – Location of Gas Shut-off Valves



Attachment No.02 – Location & Operation of Drain (surface water and sewer) Isolation Valves



Emergency Shut-off Valve Operation – CEDAR

DURING AN EMERGENCY

To activate the drain close valves push in **BOTH** of the red buttons marked '**EMERGENCY**' on the below panels.
There are two sets of buttons. One in the main yard by the forklift entrance to the warehouse and one in the server room in the office block. BOTH of these do the same thing.

YARD PANEL

OFFICE PANEL

Note: On the Office Panel, 'Valve 3' (the one with the key) does not need to be activated. It has no function and belongs to a previous system.

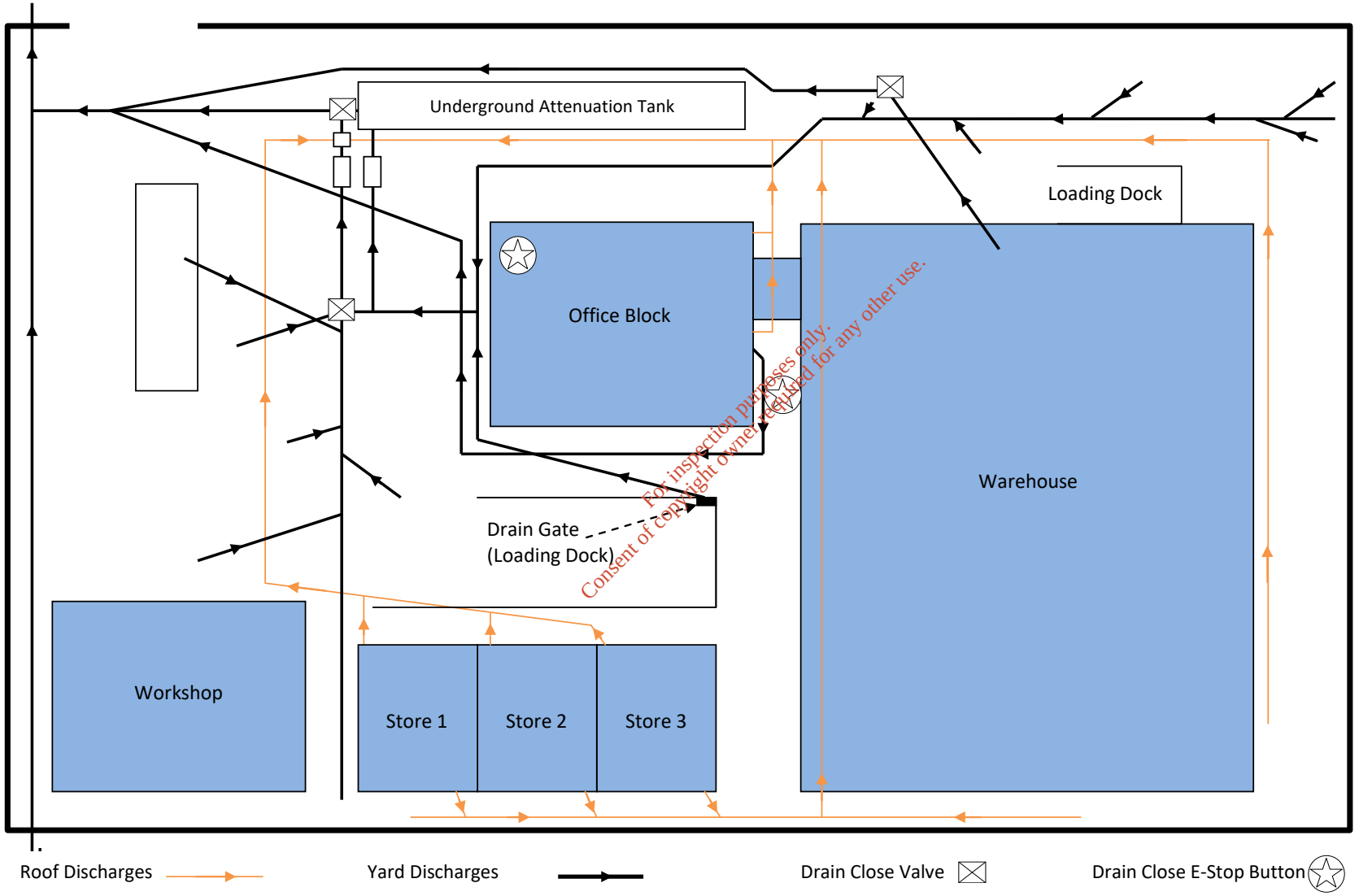
AFTER THE EMERGENCY

The drain close valves can only be opened by entering the manholes and turning the fly wheels to the open position.

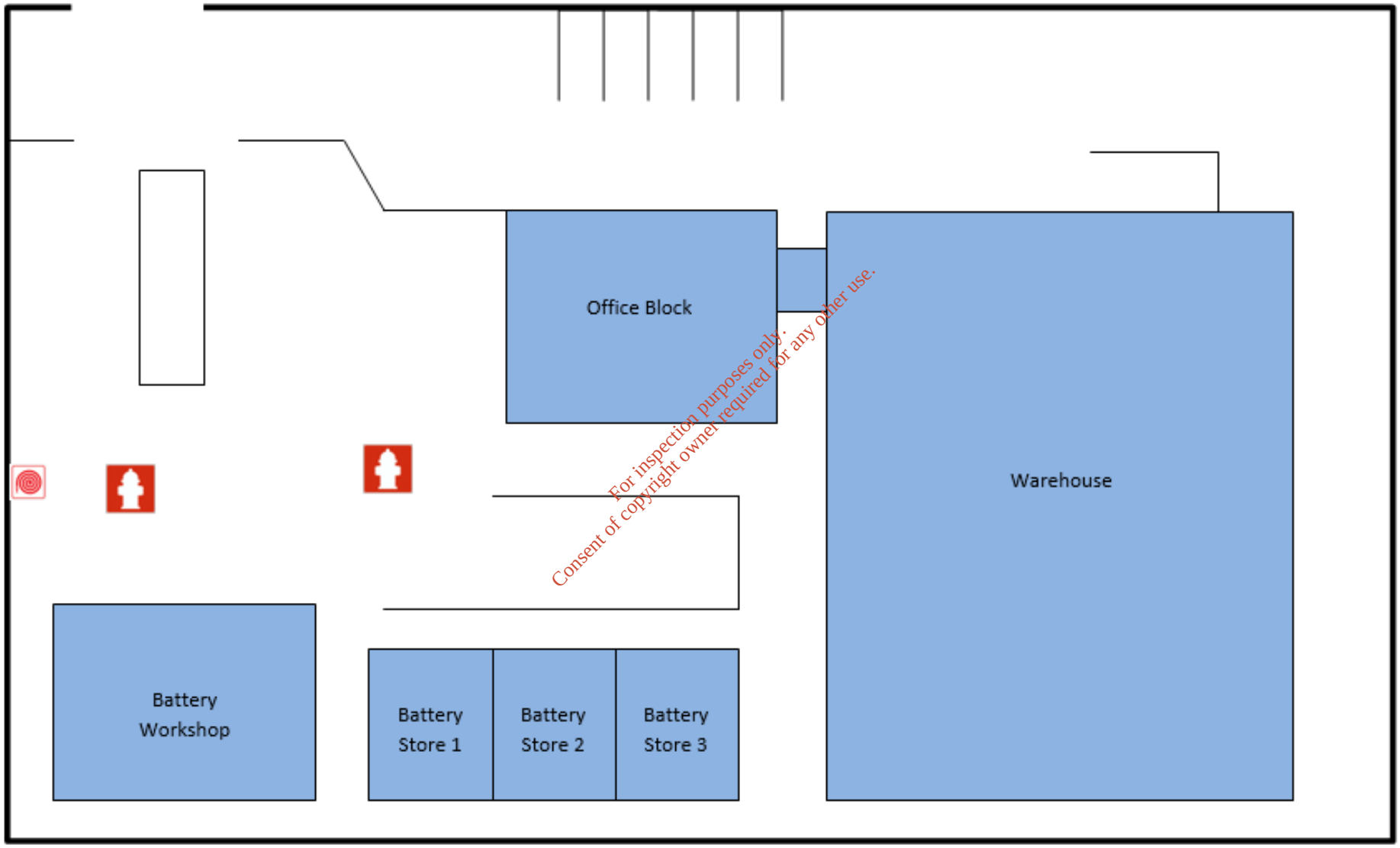
These may only be opened with the **express permission of the Facility Manager**. The decision to open the valves that release liquid to sewer will be based upon the level of contaminants in the contained fire water or spilled chemical.

Please note that the contents of the drainage system and the associated sumps/interceptors/silt traps may need to be emptied via tanker and sent for treatment/disposal at an authorised treatment facility.

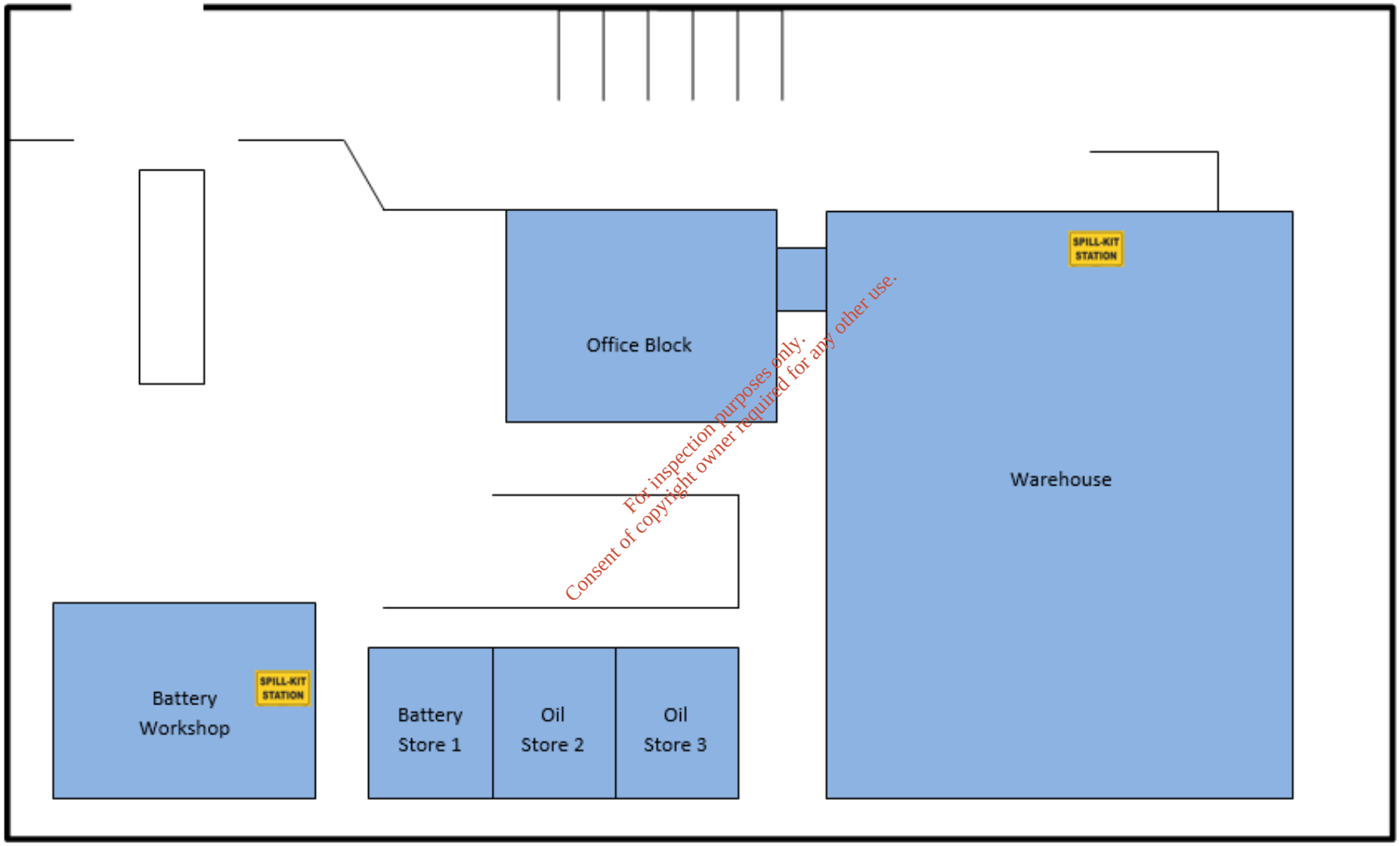
Attachment No.03 – Drainage Map



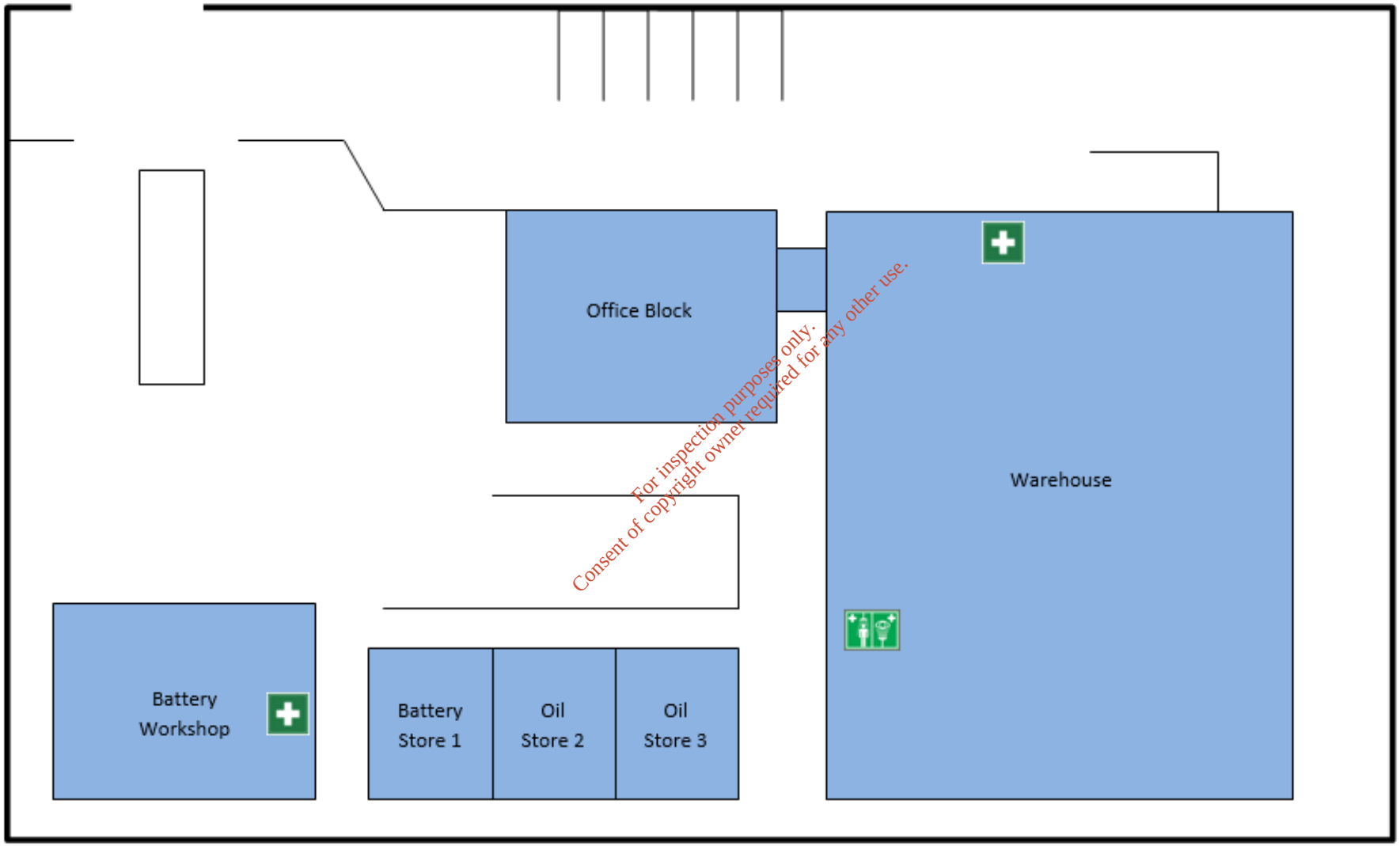
Attachment No.04 – Location of Fire Hydrants and Fire Hoses



Attachment No.05 – Location of Chemical Spill Containment Equipment



Attachment No.06 – Location of Emergency Shower-Eyewash Units and First Aid Kits



Attachment No.07 – Expected Volumes of Process Chemicals & Materials on Site

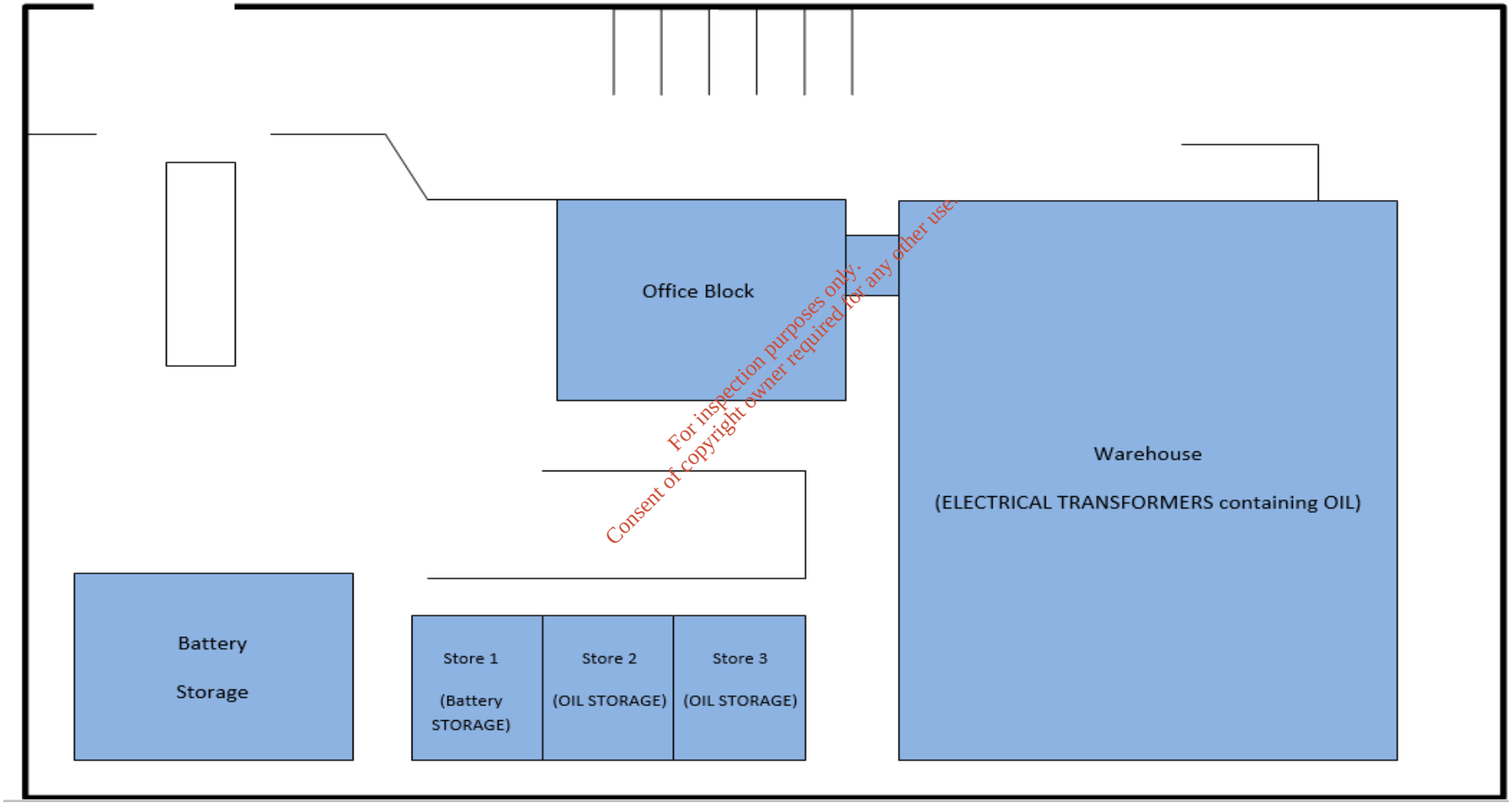
Process chemicals are chemicals utilised in the processing of waste chemicals/materials.

Please note that the data in the below table are approximate volumes only.

Line No.:	Type	Location	Volume	Primary Hazard
Line No.01	Transformer Oil	Main Warehouse & Storage Units	10,000litres	Flammable
Line No.02	Battery Acid (in lead/acid batteries) – Sulphuric Acid	Yard Warehouse & Storage Units	2,000litres	Corrosive
Line No.03	Waste Residue (Flue Gas Residue & Boiler Ash)	Main Warehouse	3,000tonnes	Flammable

Attachment No.08 – Waste Chemical/Waste Material Storage Areas

CEDAR



Attachment No.09 – Access Routes to the Facilities

Attachment No.11 – Incident Log

Line No.	Description of Action Taken	Action Taken By