Corporate-wide Procedure

CONTROLLED DOCUMENT

Pollution Incident Response Management Plan – Sydney West 330kV Substation

Summary					
The purpose of this document is to outline how the risk of a pollution incident will be minimised and controlled, and the actions to be taken immediately following a pollution incident to manage the incident at Sydney West 330kV Substation.					
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A printed copy of this document may not be the current version. Please refer to the Controlled and Business Practice Documents section in The Wire to verify the current version.

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1. Purpose

The purpose of this PIRMP is to:

- Outline how the risk of a Pollution Incident will be minimised and controlled through the identification of risks and the development of planned actions to minimise and manage those risks; and
- Document the notification protocol to ensure comprehensive and timely communication about a Pollution Incident is provided to relevant stakeholders.

A Pollution Incident is defined by the POEO Act as 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.

2. Scope

This PIRMP has been prepared in accordance with:

- Part 5.7A of the POEO Act;
- Chapter 8, Part 4 of the POEO (General) Regulation 2022; and
- The EPA's Environmental Guidelines: Preparation of Pollution Incident Response Management Plan, September 2022.

Following discussions with Christopher Burt, Environment Protection and Regulation Group, Office of Environment and Heritage it was agreed the scope of this PIRMP would be limited to the activities licensed under Transgrid's EPL 7119 i.e. the storage of waste, and not include the broader activities taking place at the substation.

3. Definitions

Term	Definition
CCO	Chemical Control Order
CREMP	Corporate Emergency Management Plan
EAA	Emergency Assembly Area
EIA	Environmental Impact Assessment
EPL	Environmental Protection Licence
IBC	Intermediate Bulk Container
Immediately	Promptly and without delay
Material harm	Material harm is defined in section 147 of the POEO Act as: (a) harm to the environment is material if:

Term	Definition
	(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.'
Non-scheduled PCB	Greater than 2 ppm and less than 50 ppm PCB
Notifiable Incident	An incident that occurs in the course of an activity so that material harm to the environment is caused or threatened.
NSWFB	New South Wales Fire Brigade
PCB	Polychlorinated Biphenyl
PCB Free	Up to and including 2 ppm of PCB
PIRMP	Pollution Incident Response Management Plan
Pollution Incident	An incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill, or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but does not include an incident or set of circumstances involving only the emission of any noise. (Protection of the Environment Operations (POEO) Act 1997)
Primary Containment	Passive systems such as spill oil tanks designed to capture and contain oil lost from oil filled equipment and storage areas. The principle of operation of these systems is to contain the oil for timely removal and disposal. Examples of primary containment are sealed transformer bunds, and transformer bunds draining to spill oil tanks with underflow discharge.
SF_6	Sulphur hexafluoride
Scheduled PCB	Greater than 50 ppm PCB
WSEEP	Wallgrove Site Emergency and Evacuation Procedure

4. Corporate-wide Procedure

The *Protection of the Environment Operations Act 1997* (POEO Act) requires the holder of an Environment Protection Licence (EPL) to prepare, keep, test and implement a Pollution Incident Response Management Plan (PIRMP).

Transgrid holds EPL 7119 for the storage of waste at the Sydney West Substation at Eastern Creek and consequently is required to prepare, keep, test and implement a PIRMP.

Transgrid's Senior Environment and Sustainability Environment Manager is ultimately responsible for preparing, keeping, testing and implementation of the PIRMP.

4.1. Relationship with Other Documents

This PIRMP has been developed to be consistent with the Sydney West Substation Emergency Response Manual and Wallgrove Site Emergency & Evacuation Procedure (WSEEP).

An Incident Notification Protocol has been developed to summarise the process for notifying the relevant authorities during a Pollution Incident with a risk of material harm (refer Section 11 and Appendix E). This should be read in conjunction with the Corporate Emergency Management Plan (CREMP) which outlines broader stakeholder notification responsibilities.

The WSEEP is to be activated in the event that an incident is a direct threat to the health of staff, contractors and visitors onsite.

4.2. Regulatory Requirements

Specific detail is required for inclusion in the PIRMP. Table 4-1 lists information mandated under Section 153C of the POEO Act and clause 72 of the POEO (General) Regulation 2022 and details where this information is located in this document.

Table 4-1 POEO (General) Regulation 2022 requirements and detail within the PIRMP

Section 153C	Detail required	Location in document
(a)	The procedures to be followed by the holder of the relevant EPL in notifying a pollution incident to: (i) The owners or occupiers of premises in the vicinity of the premises to which the EPL relates, and (ii) The local authority for the area in which the premises to which the EPL relates are located and any area affected, or potentially affected, by the pollution, and (iii) Any persons or authorities required to be notified by Part 5.7 (of the POEO Act)	Section 11 Section 12
(b)	A detailed description of the action to be taken, immediately after a pollution incident, by the holder of the relevant EPL to reduce or control any pollution,	Section 10
(c)	The procedures to be followed for co-ordinating, with the authorities or persons that have been notified, any action taken in combating the pollution caused by the incident and, in particular, the persons through whom all communications are to be made,	Section 11 Appendix E
(d)	Any other matter required by the Protection of the Environment Operations (General) Regulation 2022 (as set out below): 72 (1)(a) A description of the hazards to human health or the environment associated with the activity to which the licence relates (the **"relevant activity"**).	Section 8 Appendix E
	72 (1)(b) The likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood.	Section 8 Appendix E

Section 153C	Detail required	Location in document
	72 (1)(c) Details of the pre-emptive action to be taken to minimise or prevent any risk of harm to human health or the environment arising out of the relevant activity.	Section 9.1
	72 (1)(d) An inventory of potential pollutants on the premises or used in carrying out the relevant activity.	Section 7
	72 (1)(e) The maximum quantity of any pollutant that is likely to be stored or held at particular locations (including underground tanks) at or on the premises to which the licence relates.	Section 7
	72 (1)(f) A description of the safety equipment or other devices that are used to minimise the risks to human health or the environment and to contain or control a pollution incident.	Section 9.2
	72 (1)(g) The names, positions and 24-hour contact details of those key individuals who: (i) are responsible for activating the plan, and (ii) are authorised to notify relevant authorities under section 148 of the POEO Act, and (iii) are responsible for managing the response to a pollution incident.	Section 6 Appendix E
	72 (1)(h) The contact details of each relevant authority referred to in section 148 of the POEO Act.	Section 6
	72 (1)(i) Details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of premises in the vicinity of the premises to which the licence relates or where the scheduled activity is carried on.	Section 12
	72 (1)(j) The arrangements for minimising the risk of harm to any persons who are on the premises or who are present where the scheduled activity is being carried on.	Section 9.3
	72 (1)(k) A detailed map (or set of maps) showing the location of the premises to which the licence relates, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any stormwater drains on the premises.	Appendix B Appendix C
	72 (1)(l) A detailed description of how any identified risk of harm to human health will be reduced, including (as a minimum) by means of early warnings, updates and the action to be taken during or immediately after a pollution incident to reduce that risk.	Section 10

Section 153C	Detail required	Location in document
	72 (1)(m) The nature and objectives of any staff training program in relation to the plan.	Section 9.1.3 Section 13
	72 (1)(n) The dates on which the plan has been tested and the name of the person who carried out the test.	Section 14
	72 (1)(o) The dates on which the plan is updated.	Section 1
	72 (1)(p) The manner in which the plan is to be tested and maintained.	Section 14

5. Overview of Activities

The Sydney West Substation transforms 330 kV power (which enters the site from the north eastern pylons) to 132 kV by stepping it down through a series of transformers. The 132 kV power is then fed into the Distribution network (Endeavour Energy) on the south eastern side of the site.

Historically, insulating oil containing traces of Polychlorinated Biphenyl (PCB) was used in transformers and electrical equipment. More recently this insulating oil has been replaced with PCB free oil and with new electrical apparatus filled with sulphur hexafluoride (SF_6) or PCB free oil. PCB contaminated material and waste is being progressively removed from service under the Chemical Control Order (CCO) and disposed of at licensed waste facilities. The Sydney West Substation has two waste stores (a Scheduled PCB store and a Non-scheduled PCB store) for which it is licensed under EPL 7119.

In addition to the substation and the waste stores, the Sydney West Substation includes the following operational areas:

- Administration buildings;
- Live-Line Training School;
- General store; and
- Workshops.

An overview of the activities associated with the Scheduled and Non-scheduled PCB stores is provided below. The remaining areas of the Sydney West Substation have not been considered as part of this Plan, except for their potential impact on the Scheduled and Non-scheduled PCB stores.

5.1. Non-Scheduled PCB Waste Store

A Non-scheduled oil storage area comprising of an open (un-covered) concreted area is located immediately outside of the Scheduled PCB store (Appendix C). Where possible, Transgrid aims to test the PCB levels of equipment in-service (prior to transportation to the Non-scheduled PCB waste store);

however this is not always possible and scrap electrical equipment is tested post decommissioning within the Non-scheduled PCB store as required.

Equipment determined to contain less than 2 ppm PCB (PCB Free) or between 2 ppm and 50 ppm (Non-scheduled) is stored here until appropriate disposal by licensed contractors has been organised. Equipment found to contain greater than 50ppm PCB is transported to the Scheduled PCB store.

As well as scrap electrical equipment, the Non-scheduled PCB store is also used to store waste oils (Non-scheduled or PCB Free).

In summary, the following activities occur within the Non-scheduled PCB store:

- Testing of PCB levels in decommissioned equipment;
- Draining of oil from scrap electrical equipment;
- Storage of wet electrical scrap equipment (containing Non-scheduled levels of PCB or PCB Free);
- Storage of waste oils (Non-scheduled PCB) in 200L drums, 1,000 L Intermediate Bulk Containers (IBCs) or 14,000 L above ground tanks.
- Pumping out of above ground waste oil tanks and removal of IBCs and drums of waste oils by a licensed contractor.

5.2. Scheduled PCB Waste Store

The scheduled waste store is an enclosed store room designed to store Scheduled PCB waste. The Scheduled PCB waste is either in the form of drained oil stored in 200L drums or 1,000L IBCs or wet electrical scrap equipment.

5.3. Location

The Sydney West 330 kV Substation is located at 200 Old Wallgrove Road in Eastern Creek within the Blacktown City Council area. Fairfield City Council borders the substation to the south. Stormwater from the non-scheduled store and substation is directed through the spill oil drainage system into a drainage line on the north western side of the site (referred to in this Plan as the Transgrid drainage line). This drainage line flows into a tributary of Ropes Creek. The site is surrounded by predominately farm land with livestock, industrial parks and a brick pit to the south west. Refer to Appendix B for a locality map for this site.

6. Contact Details

Table 6-1 summarises the names, position titles and 24 hour contact details of the key individuals responsible for managing incident response and notifying the relevant authorities. Refer also to the Incident Notification Protocol (Appendix E) and the *CREMP.*

Table 6-1 Emergency Contact Details

Site Location Details	
Site	Sydney West Substation
Address	200 Old Wallgrove Road, Eastern Creek

Location Description	Nearest Cross Street – Wallgrove Road		
Latitude	-33.8180	Longitude	150.8290
Contact	**Contact Number**	**Alternate Number**	**For**
External Telephone (Relay Room)	(02) 8818 0736	Internal Phone (Relay Room)	948 736
External Telephone (Control Room)	(02) 8818 0621	Internal Phone (Control Room)	948 621
Transgrid			
Transgrid Emergency	555		All emergencies
Operator	555	1800 027 253	All emergencies
Sachin Singh, Manager of Maintenance Engineering - Substations	(02) 9620 0630	0447 264 892	For all pollution incidents
Ian Davidson Head of Maintenance	(02) 6226 9600	0438 765 732	For all pollution incidents
Senior Environment and Sustainability Manager David Donehue	(02) 9620 0543	0402 101 000	For all pollution incidents
Emergency Services – 000 (or 112 from a mobile)			
Fire Brigade	000	112 (from a mobile)	Fire
Fire and Rescue NSW	(02) 9493 1863	(02) 9265 2999 (Head Office)	Hazardous Materials Response
Ambulance	000	112 (from a mobile)	Injury
Police (Mount Druitt)	(02) 8805 8399	112 (from a mobile)	As required
Fire Station	(02) 9832 4433 (Eastern Creek)	(02) 9672 8250 (Huntingwood)	Fire
State Emergency Service	132 500	(02) 4251 6111 (Head Office)	Spill containment
Relevant Authorities			
Environment Protection Authority (EPA)	Environment Line 131 555		Notifiable incident (L2 or higher - Pollution incidents causing or threatening Material harm)
Council – Blacktown City	9839 6000		Notifiable incident
Council – Fairfield City	9725 0222		Notifiable incident
Sydney Water	13 20 90		Emergency assistance

NSW Ministry of Health – Parramatta (Westmead Hospital)	(02) 9840 3603	02 8890 5555 (After Hours)	Notifiable incident – ask for Public Health Officer on call
SafeWork NSW	13 10 50 – 24 hour	13 10 50 – 24 hour	Notifiable incident
Neighbours who may be affected by an incident			
Jacfin PTY LTD	Contact Ray Waterhouse	ray.waterhouse@hotmail.com	Oil escaping from containment system/Fire
Fitzpatrick Investments	Contact Jamie Stewart	0410 579 154	Oil escaping from containment system/Fire
CSR Bricks and Roofing Bricks	9620 2172		Fire
Sydney Water Pipelines	13 20 92 8.30 am to 5.30 pm (Mon-Fri)	13 20 90 (24 hours)	Fire
Roads and Maritime Services (RMS)	131 700		Fire

7. Inventory of Pollutants

Table 7-1 provides an indication of the maximum volume and/or weight of Scheduled and Non-scheduled PCB materials that may be stored on site at any one time. The scope of this plan does not identify potential pollutants that may be stored on site that are not related to activities covered under EPL7119. Refer to the Sydney West 330kV Substation – Emergency Response Manual (MNA-SUB-ERM-263) for an inventory of in-service equipment with insulating oil containing PCB and insulating oils of significant volumes and other hazardous waste (Section 5 of Manual) kept on the premises.

Table 7-1 Potential material stored on site within the Scheduled and Non-scheduled PCB stores

Description	Location	Maximum Quantity
Solid PCB waste	Scheduled store	5 tonnes
PCB oil	Scheduled store	2,000 Litres
Waste transformer oil	Non-scheduled store	30,500 Litres
Wet electrical waste	Non-scheduled store	50 tonnes

8. Description and Likelihood of Potential Hazards

A description of the potential hazards to human health or the environment associated with the activity being undertaken at the two waste stores is presented in Appendix A. Appendix A describes the likelihood of the identified hazard occurring, the circumstances or events that could, or would, increase that likelihood and the controls that Transgrid has implemented to prevent/respond should the activity occur on site.

The Sydney West Substation is located in a semi-rural area with an Industrial Centre to the north east, livestock farming to the west and a brick pit to the south east. Presently the site is isolated from densely populated areas; however the area is located within Land Zone 4 (Industrial Zone) of Blacktown Council and is undergoing increasing industrial development. As a result this PIRMP will be reviewed on an annual basis to re-assess potentially affected residents and assess if nearby facilities handle dangerous or explosive materials which may be affected by a Pollution Incident on the Transgrid site. New developments will be contacted and appropriate contact information obtained and entered into the Emergency Contact List in Section 6.

Runoff from the site drains into the Transgrid drainage line on the western side of the site. This Transgrid drainage line flows into a tributary of Ropes Creek (refer to Location Map, Appendix B).

9. Mitigation Measures

9.1. Pre-emptive Actions

Transgrid has implemented a number of pre-emptive measures to minimise or prevent risk of harm to human health or the environment arising from its activities. These include both engineering controls and administrative controls.

9.1.1. Engineering Controls

The Scheduled PCB store is a dedicated and enclosed storage warehouse. The store has the following controls to minimise potential Pollution Incidents and their impacts:

- Locked and access is restricted;
- Is a non-smoking area with restricted ignition sources (e.g. light fittings and switches);
- Warning signs displayed at entry;
- Sealed concrete floor and bund walls;
- Bunding requirements meet AS1940:2004;
- The capacity of the bund is a minimum 130% of the largest oil volume plus 100 mm of freeboard (estimated capacity of bund is 16,000 L);
- There are no drainage outlets. The bund drains to a blind sump which can be pumped out in the event of a spill by a licensed contractor; and
- Well lit and ventilated;

Whilst the Scheduled PCB store is self-contained with no drainage outlets, in the rare event that the bund failed and a loss of containment occurred it would drain to the Non-scheduled PCB outdoor store.

The Non-scheduled PCB store is a large, vehicle assessable, concreted outdoor area with a concrete bund around its perimeter providing secondary containment. The Secondary Treatment System has been designed to have a minimum holding capacity of greater than 200% of the largest oil volume plus fire water inflow and a 1 in 100 year storm event. The area drains to a sump which is connected to the Oil Spill drainage system. The Oil Spill drainage system comprises of two Spill Oil Tanks (80 kL and 140 kL) equipped with a baffle oil/water separator. The oil/water separator discharges to the Transgrid drainage line which flows into a tributary of Ropes Creek.

If the bund in the Non-scheduled PCB store were to overflow it would drain to a gravel storage yard.

9.1.2. Standards and Procedures

Transgrid has developed the Oil Management in procedure, which sets out the procedures to be followed for the management of insulating oil. The procedure identifies the controls implemented at each stage of work to reduce the likelihood of a Pollution Incident onsite.

In addition Transgrid has developed the following procedures related to PCB oil and waste management:

- Waste Management
- Oil Management
- Hazardous Chemicals Handling Storage and Transport
- Inspection, Test, Licencing and Competency
- Authorisation to Work
- Work Instruction – Waste Management of Oil and Oil-Filled A Equipment
- Environmental Guidance Note – Transportation of Harmful Materials and Spill Response

These procedures identify administrative controls such as:

- The identification of PCB contaminated equipment and waste including the process of oil sampling.
- Maintenance of oil containment structures (equipment drain valves, sealed bunds and Spill Oil Tanks).
- Monthly inspections and an annual audit of PCB Waste Management and Reporting.
- Assessment prior to commencing work involving working with oil. An assessment is performed and appropriate precautions and control measures are identified.
- Documentation of the assessment process using:
- Environmental Moderate Risk Checklist Pumping or treating oil requirements, for example use of drip trays, Camlock fittings, sealing of drainage points if appropriate.
- Draining of scrap equipment, sealing of drainage bath, closing of drain values for transport and disposal.
- Compliance with work procedures, for example draining hoses into containers, drip trays are to be wiped clean and soiled rags disposed of as oil contaminated material.
- Prevention of cross contamination and testing the oil for PCB contamination.

9.1.3. Training

Training of relevant staff is conducted on an as needs basis as identified during an Annual Training Plan developed by Managers/Team Leaders for employees under their control. An up-to-date list of training topics, target groups and training currency is provided on ‘The Wire’.

Staff handling PCB materials and wastes must be authorised under Transgrid’s Authorisation to Work or be appropriately instructed to carry out such work. Supplementary toolbox talks and pre-work briefings will be carried out prior to handling PCB waste.

9.1.4. Insurance / Contingency funds

Transgrid has adequate insurance and / or contingency funds available to cover the costs of any clean up undertaken including the recovery of costs by emergency response agencies and the EPA.

9.2. Safety Equipment

A number of spill kits are stored on site for use in the event of an accidental spill. In addition to absorbent pads, pillows and granules, the kit includes an oil containment boom that would be deployed in the event that oil is flushed through the spill oil system and enters the drainage line. The drainage line has permanent anchor points installed to facilitate the deployment of the booms. The location of spill containment equipment (including spill kits) is shown in the Site Plan (Appendix B).

Appendix B and C of the Oil Management procedure include a description of PPE and spill containment devices for use in the event of a Pollution Incident on site.

9.3. Minimising harm to persons on the premises

Transgrid has implemented a number of pre-emptive measures to minimise or prevent risk of harm to human health or the environment arising from its activities. These include both engineering controls and administrative controls.

The WSEEP outlines the procedure to follow when an emergency occurs that requires the evacuation of persons from site. Section 3 describes a two phase alarm system in the case of an emergency:

The Alert Siren makes a “beep, beep, beep..” noise and is intended to inform personnel of a possible emergency, to prepare for a possible evacuation, and to gain attention for personnel to listen to the PA announcement for instructions.

The Evacuation Siren makes a “whoop, whoop, whoop…” noise and is intended to signal the evacuation of personnel on site to the designated Emergency Assembly Area (EAA).

Any person witnessing or having knowledge of an event which could, or has escalated into an emergency is to contact the Operator on 555. First Aid attendants (identified it the WSEEP) are to assemble in a clear area within the EAA in readiness for dispatch to the Site of Emergency, or the First Aid Room.

10. Actions to be taken during or immediately after a pollution incident

There are two main Pollution Incidents that may require an immediate response with regards to the Scheduled and Non-scheduled PCB stores:

1. Major spill/loss of containment; and
2. Fire.

10.1. Spill Response

Initial response spill kits are kept in the immediate vicinity of the PCB store with additional spill management resources located on site (refer Appendix C). In the event of an oil spill, the control measures

outlined in Section 5.6 of the Emergency Response Manual for Sydney West 330kV Substation shall be followed and include:

1. If possible, stop the spill at its source by closing valves, placing a leaking item within its own over-turned container etc.
2. Activate Incident Notification Protocol (Appendix E) - Advise System Controller via Transgrid Emergency Number 555.
3. Inform the Transgrid Site Controller (in cases involving fire hazards).
4. Identify the site as described on the Emergency Contact Details (Section 6).
5. Deploy oil absorbent material to prevent oil escaping the site. Location of oil spill equipment is indicated in Appendix C.
6. If additional assistance is required, contact the Transgrid System Controller (555) or the Site Controller (in case involving fire).
7. Check the following to ensure oil containment:
   - For the Scheduled PCB store, that the bund is effectively containing the spill.
   - For the Non-scheduled PCB store, that the sump is draining satisfactorily, that drains are effective.
   - Check discharge from the Spill Oil Tank to detect any oil carry-over in the overflow, deploy booms as appropriate.
   - For spills in bunded areas, ensure containment system does not over-top.
   - Identify any 'clean water' drainage systems/areas and block or divert oil spill to prevent cross contamination.
8. Identify the source and quantify:
   - The source and nature of the spill.
   - If spill occurs in Scheduled store assume PCBs are present. Ensure appropriate safety precautions are implemented.
   - If spill occurs within substation refer to Sydney West Substation Emergency Response Manual, Appendix C to identify if equipment contains PCB. Ensure appropriate safety precautions are implemented.
   - Estimate the volume of liquid released. From this, assess the probable extent of the spill and the actual and/or potential environmental consequence.
   - Arrange pumping or other preventative actions to limit risk of overflow.
9. Review the Schedule of Site Sensitivities (Table 10-1), and assess the impact of any spill. Report to Transgrid System Controller (555) where a potential of pollution exists.

Table 10-1 Schedule of site sensitivities

Sensitivity	Controls	Contact
An ephemeral watercourse, which leads to Ropes Creek, lies on the south west boundary of the existing buildings and car park	Ensure any oil spills are controlled on site. Refer drainage diagram for oil spill containment equipment location (Appendix C)	Senior Environment and Sustainability Manager (02) 9620 0543 0402 101 000

Sensitivity	Controls	Contact
New warehouse and office locations along Wallgrove Road – need to advise neighbours in case of fire or noise impacts	Notifications as required	Senior Environment and Sustainability Manager (02) 9620 0543 0402 101 000
Grazing and feeding areas around site for livestock	Prevent fires from spreading to grassed areas.	Senior Environment and Sustainability Manager (02) 9620 0543 0402 101 000

10. Report details of incident via CAMMS, Transgrid's incident reporting system which is available on the Wire or on the CAMMS Incident Manager app on Transgrid issued iPhones or according to HSE Incident Management procedure.
11. Ensure Incident Notification Protocol (Appendix E) has been activated (Step 2) and relevant authorities and landowners have been contacted as appropriate to the incident.

10.2. Fire Response

The Emergency Response Manual for Sydney West 330kV Substation, Section 5.2 describes the management of fire on site and is summarised below. In the event of a fire the Incident Notification Protocol (Appendix E) for a fire must be activated in the event of suspected PCB oil or equipment being ignited or threatened with ignition. The Incident Notification Protocol (Appendix E) identifies the relevant authorities to be notified immediately.

In cases where a major fire hazard exists, NSWFB require that Transgrid nominate one person to be responsible for all communications and advice between the NSWFB Incident Commander and Transgrid staff onsite. The responsibilities of the nominated Transgrid Site Controller are listed in the Sydney West Substation Emergency Response Manual, Attachment 10.

In situations involving an oil fire, the NSWFB shall not be given access to the site until all relevant equipment has been electrically isolated in accordance with Transgrid Power System Safety Rules.

Local Response to a Major Fire

Immediately:

1. Notify on site staff of the fire
2. Evacuate if necessary (as per the WSEEP)
3. Ensure all staff are safe
4. Advise System Controller via Transgrid Emergency Number 555 to request Fire Brigade to attend
5. Attend to casualties
6. Review Schedule of Liquid Capacities to estimate potential fuel for fire

7. Review Schedule of PCB Contamination to determine potential hazards.
8. Nominate Transgrid staff member to act as Site Controller and act as site liaison with System Operations and any other emergency services until advised otherwise.

Only if assessed safe to do so:

9. Make preparations to de-energise equipment (Authorised Person's ONLY)
10. Prepare and utilise local firefighting equipment for use to contain fire (refer Water Valve and Fire Equipment Location Diagram Appendix D) if attendance of NSWFB is delayed, and safe to do so.
11. Provide the NSWFB Incident Commander with the Sydney West 330kV Substation Site Pack (which consists of Attachment 1 – 9 and Attachment 11 of the Sydney West Substation Emergency Response Manual.

When time and/or resources allow:

12. Review Schedule of Site Sensitivities and consider impacts
13. Deploy oil booms at secondary containment if loss of oil is involved.
14. Report details of incident via the Incident Notification System available on The Wire or according to Fire Protection procedure.
15. Take appropriate steps to preserve evidence related to failure/incident – to assist in failure/incident investigations.

11. Notification

A Pollution Incident where there is a risk of material harm (as defined by the POEO Act and reproduced in the Definitions section of this Plan) is required to be notified *immediately* to the EPA, NSW Health, Fire and Rescue NSW, WorkCover NSW and local council.

The *CREMP* describes Transgrid's response to incidents of varying degrees of significance to the environment, workers and public safety.

The *CREMP* classifies incidents as:

- Level 1 – Local incident;
- Level 2 – Significant incident;
- Level 3 – Major Emergency;
- Level 4 – Industry coordinated response; and
- Level 5 – Government intervention.

The *CREMP* does not specifically consider material harm to the environment in its classification of incidents however based on the examples provided within the *CREMP* incidents categorised as Level 2 or above present a risk of material harm to the environment.

Section 2.2 of the *CREMP* describes the key responsibilities of each response team for each level of incident. Section 3.5 of the *CREMP* outlines the stakeholder communication responsibilities

during/following a Pollution Incident. In addition to the *CREMP*, Transgrid has developed a HSE Incident Management procedure which outlines the process of responding to and notifying environmental incidents.

An Incident Notification Protocol has been developed to summarise the process for notifying the relevant authorities about Pollution Incidents with a risk of material harm. The Notification Protocol is consistent with the *HSE Incident Management* procedure. For broader notification responsibilities (beyond the relevant authorities) refer to the *CREMP*.

In the process of notifying the relevant authorities the following information must be communicated to each authority in accordance with the POEO Act (C 150) during Pollution Incidents causing or threatening material harm:

1. The time, date, nature, duration and location of the incident,
2. The location of the place where pollution is occurring or is likely to occur,
3. The nature, the estimated quantity or volume and the concentration of any pollutants involved, if known,
4. The circumstances in which the incident occurred (including the cause of the incident, if known),
5. The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known,
6. Other information prescribed by the regulations

The information required to be reported is only that information known to the person notifying the incident when the notification is given. If any of the above information is not known during initial notification but becomes known afterwards, that information must be relayed to the relevant authorities.

12. Communicating with Neighbours and the Local Community

Adjacent neighbours/ properties will be directly notified (by telephone) by the Manager of Maintenance Engineering - Substations or Head of Media and Communications upon first becoming aware of an incident with the potential to affect them. Contact details of the adjacent properties are provided in Table 6-1. Regular updates may be provided via local radio and/or television and/or the relevant local councils. Refer Table 12-1 for a suggested list of radio and television agencies.

Properties further afield will be notified that an incident has occurred as deemed appropriate by the General Manager of Maintenance and/or Senior Sustainability and Environment Manager.

Table 12-1 Media contact numbers

Radio media	
ABC 702 Radio	02 8333 1234 139 994
104.1 2day FM	13 10 60 02 9375 1041
104.9 Triple M	133 353 02 9367 1000
96.9 Nova	132 410
89.3 2GLF	02 9822 8893

95.3 Smooth FM (formerly Vega)	13 59 50
954 AM 2UE	131 332 131 283
2GB	02 8514 9500 131 873
96.1 The Edge	02 9611 1961 131 096
Kick FM	02 4720 3891
Ethnic Radio (Radio Australia)	02 9755 7938
SWR 99.9 FM	02 9676 3999
Television media	
Channel 10	02 9650 1010
Channel 9	02 9906 9999
Channel 7	02 8777 7777
ABC Television	02 8333 2137
SBS Television	1800 500 727
Ethnic TV (UBI World TV)	02 9776 2222
Local Council	
Fairfield City Council	02 9725 0222
Blacktown City Council	02 9839 6000

The following information may be provided in the event of a fire:

- Close windows and doors and remain inside. Wait for further instructions from the emergency services.

In response to a discharge of PCB oil / PCB Free oil into Ropes Creek, the following specific information may be provided:

- Move any stock which has access to Ropes Creek or the tributary of Ropes Creek to another paddock/area where the creek is not accessible.
- Avoid Ropes Creek and the tributary of Ropes Creek i.e. do not drink any water from within the creek or allow animals and pets to drink the water.
- Do not bath or swim in the water.

Refer to section 3.5 of the *CREMP* for the delegation of stakeholder communication responsibilities during/following a Pollution Incident (other than those relating to notifying the relevant authorities).

13. Staff Training

Staff and contractors involved in the storage, handling and transport of hazardous chemicals/dangerous goods shall be provided training in risk assessment, spill response and clean-up methods, incident notification requirements and use of personal protective equipment (PPE). Training will be developed by the Senior Environment and Sustainability Manager.

All staff handling oil, including PCB material, shall be authorised E2 as outlined in the Authorisation to Work Procedure. Drivers responsible for transporting > 3000L of oil, PCB material or any trackable waste shall be authorised E3.

Staff involved in the transport of Dangerous Goods must receive training by a Registered Training Organisation (RTO) appropriate for the work they undertake. Licences are valid for 5 years.

14. Testing of Plan

The Wallgrove Site Emergency and Evacuation Procedure (*WSEEP)* is tested every 12 months using a simulated evacuation exercise. In accordance with the POEO (General) Regulation 2022 Clause 75, the PIRMP will be tested once every 12 months. This will occur alongside the testing of the WSEEP and will involve a practical exercise or drill of a Pollution Incident within the Scheduled and/or Non-scheduled PCB store. The purpose of the testing is to ensure the PIRMP is up to date and capable of being implemented. This will be managed by the Senior Environment and Sustainability Manager.

In addition, the PIRMP will be tested within one month of a pollution incident occurring that caused or threatened material harm to the environment within the Scheduled and/or Non-scheduled PCB stores to assess, in light of that incident, whether the information included in the plan is accurate and up to date and the PIRMP is still capable of being implemented in a workable and effective manner.

A record of the PIRMP tests conducted will be maintained in TRIM, including the dates the testing took place and the name of the staff members involved in the testing.

On the 26th April 2024, the environment team simulated a hypothetical spill of approximately 200L of non-scheduled PCB oil from a 1000L IBC in the non-scheduled PCB Storage Area. Some minor findings were noted and these are either closed out or in the process of rectification.

Updates of the PIRMP will be recorded on the revision summary page.

15. Availability of Plan

A copy of the PIRMP will be located at the Sydney West Substation Administration building, Control Room, and within the Scheduled Store so as to be easily accessible to those who responsible for its implementation and to an authorised officer of the EPA on request.

The Incident Notification Protocol (Appendix E) and community communication strategy (Section 12) will be made available to the public via Transgrid's website or made available without charge to any person who makes a written request for a written copy (as per Clause 73 of the POEO(General) Regulation 2022).

16. Maps

The Location Map (Appendix B) shows the location of the Sydney West Substation, the surrounding area that is likely to be affected by a pollution incident and the location of the nearest water course (Ropes Creek).

The Site Plan (Appendix C) shows the location of the Scheduled PCB store and the Non-scheduled PCB store, the oil / water separator system and the location of the spill kits.

17. Accountability

Title	Responsibilities and Accountabilities
Manager of Maintenance Engineering – Substations and Head of Media and Communications	Notification of adjacent neighbours/properties when they become aware of an incident that has the potential to affect them.
Senior Sustainability and Environment Manager	Update of this procedure
Manager of Maintenance Engineering – Substations and General Manager of Maintenance	Authorising the annual testing of this procedure

18. Implementation

The following actions will be undertaken to support implementation of this procedure:

- Email notification of staff impacted by this procedure;
- Annual testing of this procedure.

19. Monitoring and review

19.1. Monitoring

This procedure will be tested annually, as required under Clause 75 of the Protection of the Environment Operations (General) Regulation 2022.

19.2. Review

This procedure will be reviewed every three years in accordance with the Document and Records Management procedure.

20. Change from previous version

Revision no	Approved by	Amendment
0	Michael Gatt, EGM/PS&CS	First Issue
1	Ken McCall, Manager/HSE	Updating of position titles and contact details to the new organisational structure.

Revision no	Approved by	Amendment
2	Ken McCall, Manager/HSE	Updating of position titles and contact details to the new organisational structure.
3	Ken McCall, Manager/HSE	Appendix E – update of flow chart to new organisational structure
4	Krista-Lee Fogarty, Manager/HSE	Section 13 and 14 - Inclusion of PIRMP testing information and training requirements for relevant personnel.
5	Krista-Lee Fogarty, Head of HSE	Reference to ARMS has been replaced with CAMMS. CAMMS is the new incident reporting system for Transgrid.
6	Krista-Lee Fogarty, Head of HSE	Inclusion of PIRMP testing information.
7	Tracy Hibbert, Acting EGM, PC&S	• Section 12 - Updated with details of PIRMP testing carried out in 3rd November 2021 • Updated references to the Protection of the Environment Operations (General) Regulation 2021 throughout the document. • Updated to new corporate branding • Position titles updated to current organisational chart
8	Jane Sherlock, EGM, PC&S	• Updated references to the Protection of the Environment Operations (General) Regulation 2022 throughout the document. • Section 14 – updated with details of PIRMP testing carried out on 13 December 2022 • Section 14 – updated to reflect legislative changes that testing of the PIRMP is only required one month after a pollution incident that caused or threatened material harm (previously all incidents, regardless of severity)
9	Marie Jordan, EGM, Network	• Section 14 – updated with details of PIRMP testing carried out in April 2024

21. References

- Emergency Response Manual for Sydney West 330kV Substation
- Corporate Emergency Management Plan (CREMP)
- Environmental Assessment Framework
- Transport, Storage and Disposal of Polychlorinated Biphenyls (PCB)
- Oil Management
- HSE Incident Management procedure
- Training Procedure
- Oil sampling Instruction

- Inspection, Test, Licencing and Competency
- Authorisation to Work
- Hazardous Chemicals Storage and Transport
- Environmental Handbook
- Waste Management
- Work Instruction – Waste Management of Oil and Oil-Filled Assets
- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations (General) Regulation 2022

22. Attachments

Appendix A – Potential Hazards and Likelihood

Appendix B – Location Map

Appendix C – Site Plan – Spill oil equipment and oil drainage diagram

Appendix D – Site Plan – Water valve and fire equipment location diagram

Appendix E – Incident Notification Protocol

Appendix A Potential Hazards and Likelihood

The following categories of Likelihood were used as per Transgrid's Aspects and Impacts Register. The assessment of likelihood does not take into account any pre-emptive measures. These are discussed in Section 7 of the PIRMP.

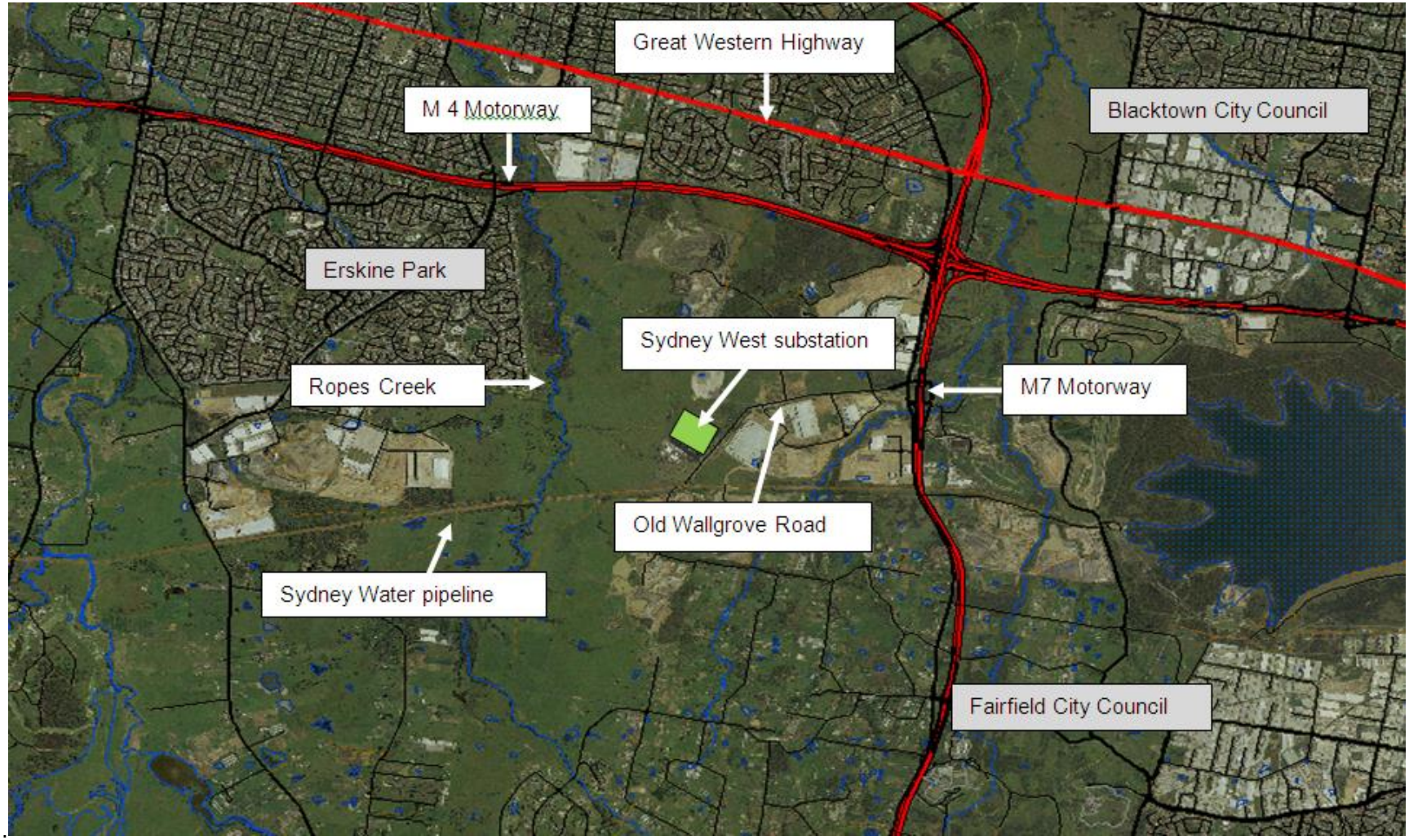
Almost Certain	Likely	Possible	Unlikely	Rare

Potential hazard	Potential consequences	Likelihood	Events which can increase likelihood
ACTIVITY: Storage of waste oils (PCB free/Non-scheduled PCBs)			
Leak, rupture of single 1000 L IBC/205 L drum	Waste oil contained in bund	Possible	Over filling storage area, failure to follow procedures, staff fatigue, incorrect storage
Leak, rupture of multiple IBCs or drums (i.e. back forklift into IBC/drum)	Waste oil contained in bund	Unlikely	Over filling storage area, failure to follow procedures, staff fatigue, incorrect storage
Leak / spill from equipment containing oils e.g. wet electrical equipment	Waste oil contained in bund	Unlikely	Failure to follow draining procedure, lack of training
Leak/ spill oil from tank storage container – due to collision with forklift or truck	Waste oil contained in bund	Unlikely	Over filling storage area, failure to follow procedures, staff fatigue.
Spill during draining of equipment – losing hose connection	Waste oil contained in bund	Possible	Failure to follow procedures, insufficient training
Container overflowing during draining of equipment	Waste oil contained in bund	Possible	Failure to follow procedures, weather conditions (e.g.. rain)
Lightning	Fire burning emissions from oils	Rare	Weather

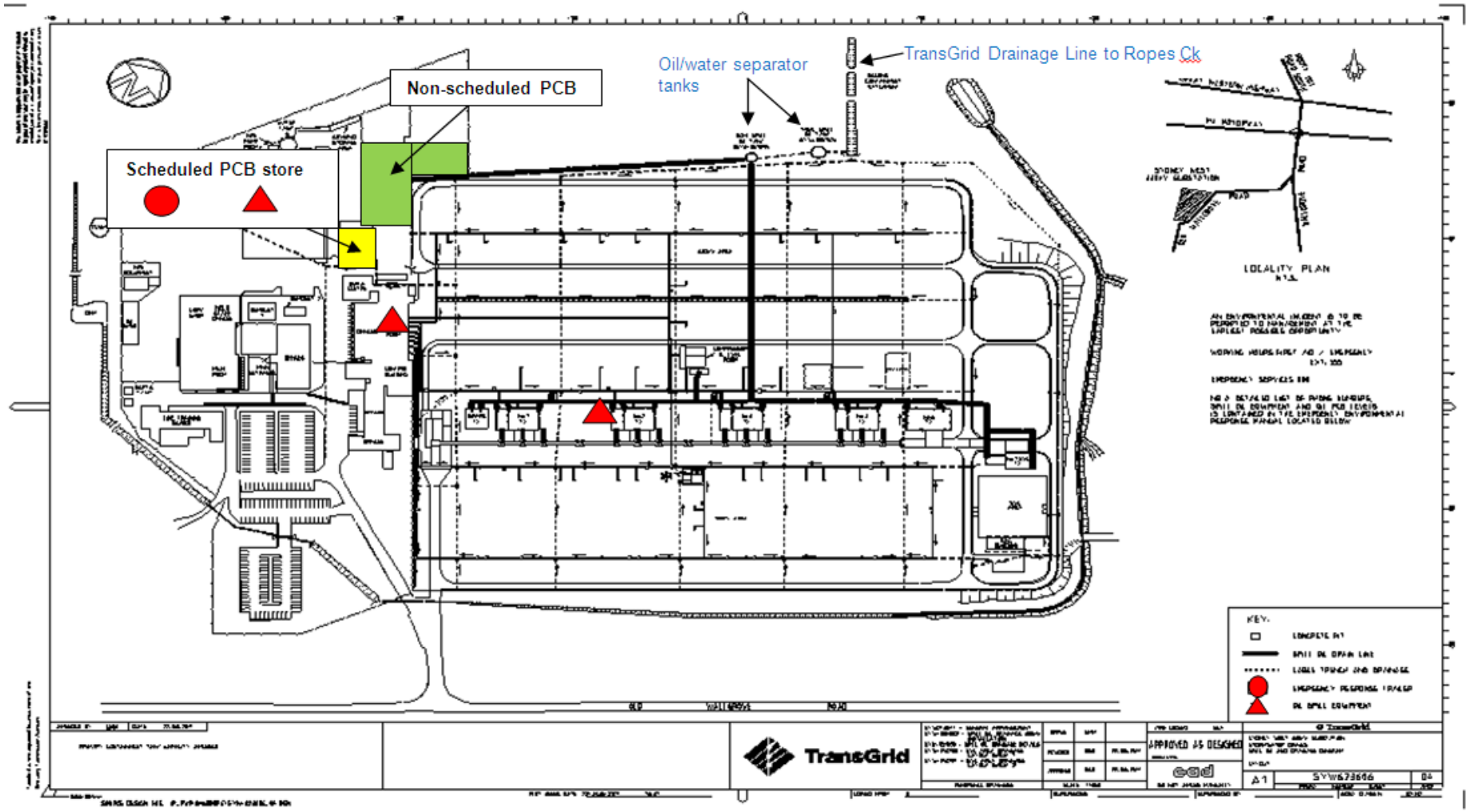
Oil catching fire	Fire burning emissions from oils	Rare	Inadequate training, incorrect storage, failure of pylon infrastructure causing ignition source for fire
ACTIVITY: Storage of waste PCB oil (Scheduled)			
Leak, rupture of single 1000L IBC /205L drum	Waste oil contained in bund/ irritation of eyes and skin	Possible	Over filling storage area, failure to follow procedures, staff fatigue, incorrect storage
Leak, rupture of multiple IBCs or drums	Waste oil contained in bund/ irritation of eyes and skin	Unlikely	Over filling storage area, failure to follow procedures, staff fatigue, incorrect storage
Damage to a container or piece of equipment (escape of large volume of PCB oil)	Waste oil contained in bund/ irritation of eyes and skin	Unlikely	Over capacity storage area, failure to follow procedures, staff fatigue, incorrect storage
Ignition of PCB material leading to fire in store area	PCB inhalation through smoke/ Respiratory tract infection	Unlikely	Failure to follow procedures, poor management of storage area leading to a presence of ignition sources
Unauthorised public entry resulting in sabotage (fire, spills etc.)	Waste oil contained in bund/ irritation of eyes and skin/ PCB inhalation through smoke/ Respiratory tract infection	Rare	Failure of security operations, (e.g. not correctly locking stores)
Lightning	Fire burning emissions from oils	Rare	Weather, inadequate training, incorrect storage, failure of pylon infrastructure
ACTIVITY: Testing of PCB levels – conducted in the Non-scheduled storage area			
During testing containers are knocked over, ruptured etc. resulting in spill of PCB	Waste oil contained in bund, captured in Spill Oil Drainage system	Unlikely	Fatigue, inadequate training
ACTIVITY: Decanting of waste oils from drainage trays to IBCs/drums			
Oil spill during decanting process within substation	Contamination of soil / groundwater /Stormwater	Possible	Inadequate training and equipment
Oil spill during decanting process within Non-scheduled storage area	Waste oil contained in bund, captured in Spill Oil Drainage system	Possible	Inadequate training and equipment

ACTIVITY: Disposal of waste oil			
Spill during pumping out of waste oil tank	Waste oil contained in bund, captured in Spill Oil Drainage system	Possible	Equipment failure, inadequate training and equipment
ACTIVITY: Maintenance of oil containment structures			
Equipment drain valves accidentally left open causing inadvertent loss of oil	Waste oil contained in bund, captured in Spill Oil Drainage system	Unlikely	Inadequate training and equipment, fatigue
Overflow of bunds during heavy rainfall (Non-scheduled area only) when the spill oil drainage sump is blocked or obstructed)	Contamination of soil / groundwater /Stormwater	Possible	Heavy rainfall, poor maintenance of sump pit
Bund failure due to poor maintenance of bund (e.g. cracks in concrete)	Contamination of soil / groundwater /Stormwater	Rare	Poor maintenance, time (maintenance)
Bund failure due to damage by mechanical impact (truck or earth tremor etc.)	Contamination of soil / groundwater /Stormwater	Unlikely	Inadequate training and equipment, fatigue
Failure of pipelines draining to oil/water separator	Contamination of soil / groundwater	Rare	Age of equipment, maintenance
ACTIVITY: Operation of oil/water separator			
Failure of Spill oil tank baffle system due to slow leak	Contamination of soil/groundwater/Runoff into Ropes Creek	Unlikely	Age of spill oil tank, maintenance , Fire (burning oil)
Failure of Spill oil tank baffle system due to large rainfall or fire water inflow	Contamination of soil / groundwater /Stormwater	Rare	Heavy rainfall, fire in substation

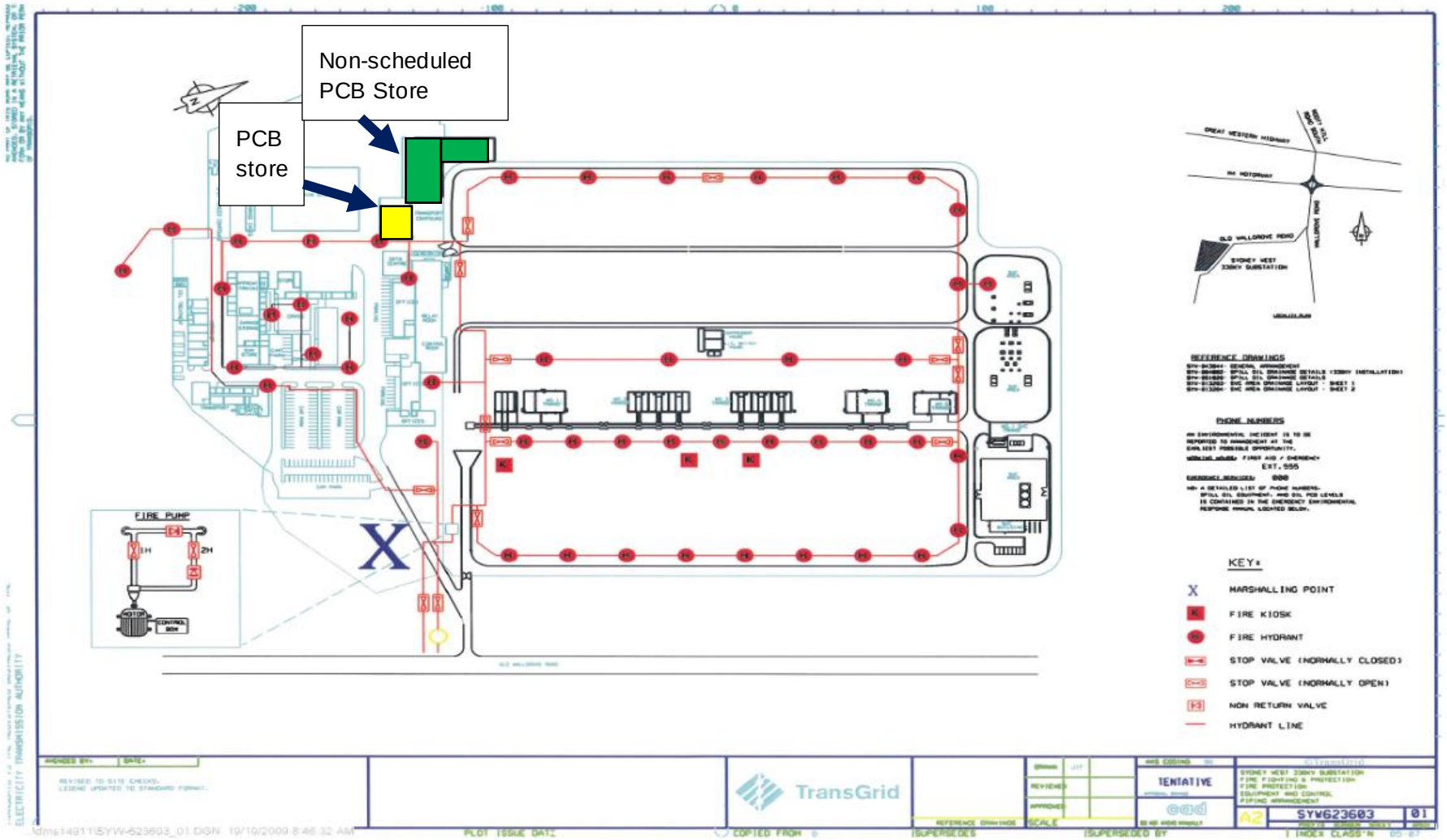
Appendix B Location Map



Appendix C – Site Plan – Spill oil equipment and oil drainage diagram

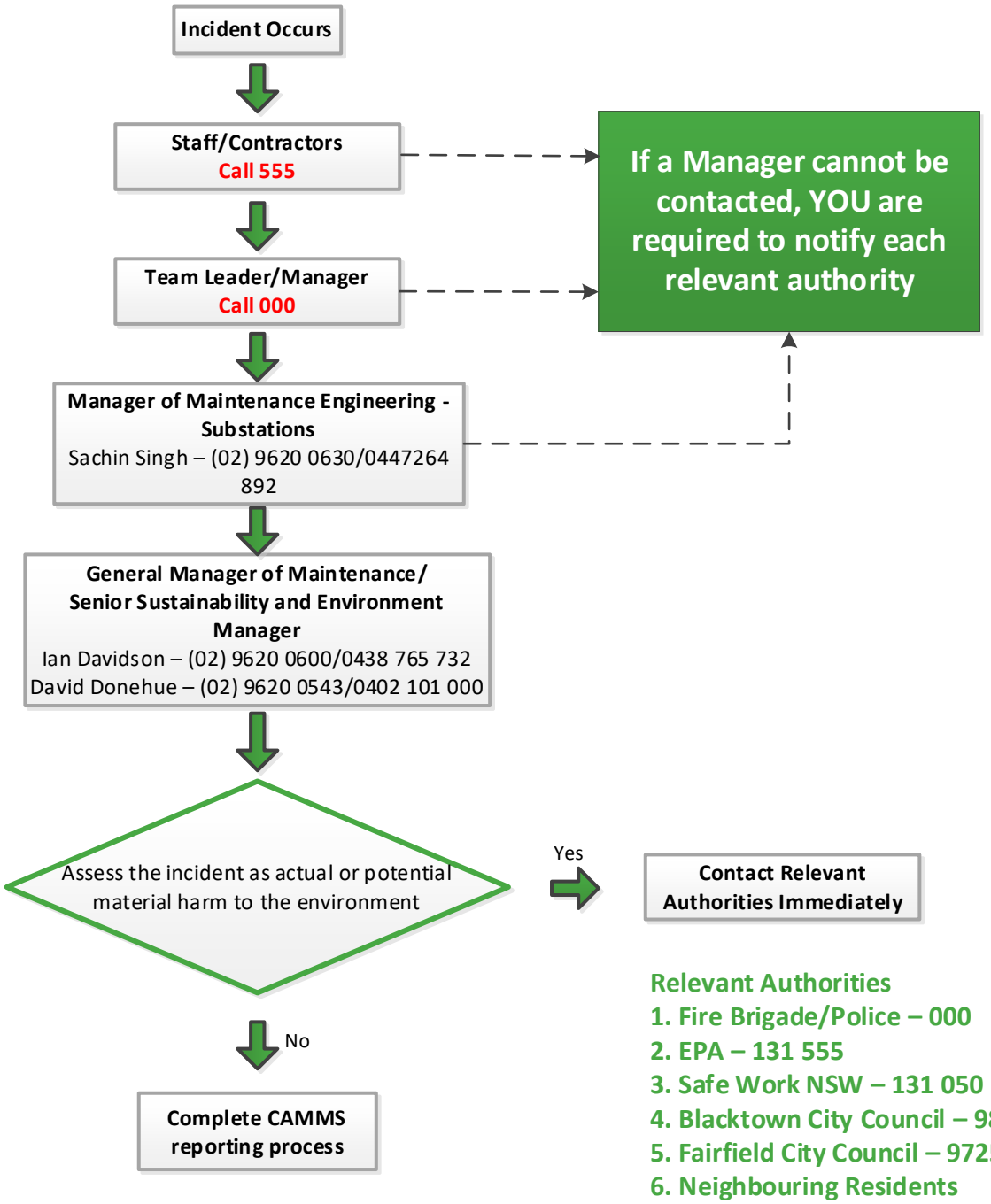


Appendix D – Site Plan – Water valve and fire equipment location diagram



Appendix E Incident Notification Protocol

POLLUTION INCIDENT NOTIFICATION PROCEDURE
Incident of actual/potential material harm



Relevant Authorities

1. Fire Brigade/Police – 000
2. EPA – 131 555
3. Safe Work NSW – 131 050
4. Blacktown City Council – 9839 6000
5. Fairfield City Council – 9725 0222
6. Neighbouring Residents

Material harm = harm to the health and safety of humans or ecosystems that is not trivial, or loss or property damage exceeding $10,000