Environmental Guidance Note – Transport of Harmful Materials and Spill Response

HSE DOCUMENT

Transport of material that has potential to cause harm requires compliance with Transgrid procedures, legislation, Codes of Practice and Transgrid's Pollution Incident Response Management Plan (PIRMP). This guidance note outlines the minimum requirements for transporting bulk oil, including PCB material, and the emergency requirements in the event of an incident such as a spill.

Transport Requirements

- Oil/PCB transport form must be compiled and approved for all oil handling and transport for >3000L outside premises or any quantity of known PCB material. A Moderate Risk Checklist may also be required.
- Vehicles used must be constructed and maintained so as to prevent the spillage of waste. Vehicles are to be equipped with a radio or mobile phone and be roadworthy and clean.
- Ensure requirements for transporting dangerous goods and placarding are implemented.

Transport vehicles must carry a folder containing copies of:

- Approved Oil/PCB transport form including NATA Certificate (where required),
- Emergency Procedures documentation (this Guidance Note),
- Safety Data Sheet (SDS)

If the material is *trackable waste* the folder must also have copies of:

- PIRMP Transportation of Waste,
- Environmental Protection Licence 7153,
- Waste Transport Certificate / Consignment Authorisation.

Additionally, vehicles carrying bulk oil / PCBs must be equipped with a kit containing:

- Electric torch;
- 1 x 204 litre wheeled garbage bin or equivalent to house the kit and retrieve a spill;
- A supply of oil absorbing material (at least 2 bags of dri-sorb granules and 1 roll of oil absorbing mat) sufficient to contain a volume of oil at least equal to that of the largest container being carried (excluding bulk tankers);
- 1 x shovel and 1 x rake;
- Protective clothing including 2 x disposable overalls, 2 x overshoes/gumboots, 2 x PVC gloves, 2 x goggles or face shields;
- 1 x dry chemical fire extinguisher;
- 2 x foam fire extinguisher; and
- Double sided road reflectors.

General Emergency / Spill Response

In the event of a leak or spill of oil or PCB material incident response must occur in accordance with the following key requirements:

STOP THE SPILL: Stop the source of the spill immediately, if it is safe to do so, in a way that is appropriate to the chemicals involved. This will reduce the level of possible contamination to the environment.

CONTAIN THE SPILL: Control the flow of the spill and contain the spill appropriate to the type of liquid involved (Refer to SDS). Prevent the spill from entering any stormwater drains by isolating drain inlets.

CLEAN UP THE SPILL: Clean up the spill by referring to the SDS for the type of chemical(s) involved. Cleaning up a spill promptly will help to protect the local environment.

NOTIFY: Once the site is safe/secure report incident to your Team Leader/Manager (refer to table overleaf).

ENSURE THAT:

- Notifiable incidents are managed in accordance with Transgrid's Pollution Incident Notification Procedure, refer to excerpt overleaf).
- The incident is entered into CAMMS.
- Sealable drums are to be used for storing contaminated wastes. The drums shall be labelled.
- Liquids are contained using absorbent materials, earth bunds or other viable methods and must not be permitted to flow into drains or waterways. Place used absorbent material in appropriately labelled drums / durable plastic bags.
- Any sand, gravel, paving, etc., that has been contaminated by a spill of PCB-contaminated oil, samples of the soil, sand, gravel, etc., and of the oil must be tested to determine the appropriate method of disposal.

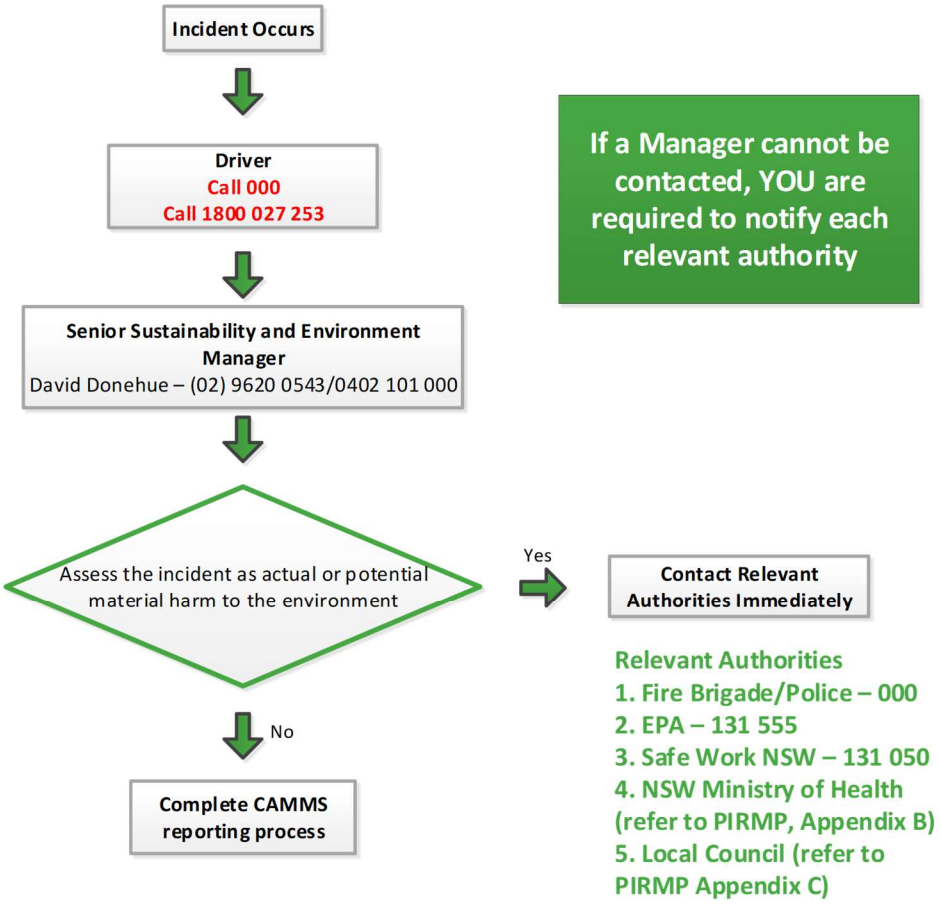
Any clothing (including aprons, gloves, overalls, wet weather gear, boots, mask filters, etc.) that comes in contact with PCB is treated as PCB waste.

VEHICLE BREAKDOWN: driver to operate flashing hazard lights or parking lights and Place double sided reflector signals in the appropriate positions (one placed 50m to 150m in front of the vehicle; one placed 50m to 150m to the rear and one beside the vehicle).

FOR MATERIAL SPECIFIC EMERGENCY PROCEDURES REFER TO THE ATTACHED *RESPONSE GUIDES*.

Transgrid Contacts	Contact Number	Alternate Number
Transgrid Emergency	1800 027 253	-
Senior Environment & Sustainability Manager David Donehue	(02) 9620 0543	0402 101 000
Head of Maintenance Ian Davidson	(02) 9620 0600	0438 765 732
Manager of Maintenance Engineering - Substations Sachin Singh	(02) 9620 0630	0447 264 892
External Emergency Contacts (excerpt from Transgrid PIRMP)		
Emergency Services – 000 (or 112 from a mobile phone)		
Fire Brigade / Fire and Rescue NSW	000	(02) 9265 2999
Ambulance	000	112
Police	000	112
State Emergency Service	132 500	
Relevant Authorities		
Environment Protection Authority (EPA)	Environment Line 131 555	
SafeWork NSW	13 10 50 – 24 hour	
NSW Office of Water	(02) 8281 7777	

POLLUTION INCIDENT NOTIFICATION PROCEDURE
Incident of actual/potential material harm



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

Materials GENERALLY transported by Transgrid

Description	Waste Code	UN Number	GHS Class	DG Class	Hazchem Code	Packing Group	EPL Transport	Response Guide (attached)
Transformer Oil (new)	NA	NA		NA Note: Classed C1 Combustible liquid	NA	NA	NA	47
Waste hydrocarbons (PCB Free oil).	J100	30XY		Note: Classed C1 Combustible liquid	NA	NA	7153	47
Waste oils and water mixtures or emulsions, and hydrocarbon and water mixtures or emulsions (PCB Free).	J120	30XY		NA	NA	NA	7153	47
Scheduled PCB oil waste (liquid) Polychlorinated biphenyls (PCBs) (PCBs >50 mg per kg).	M100	2315			2X	II	7153	47 and 48
Scheduled PCB material waste (solid) Waste substances and articles containing or contaminated with PCBs ([PCBs] >50 mg per kg).	M100	3432			2X	II	7153	47 and 48
Non-Scheduled PCB waste Solvents, oils and materials contaminated with PCBs ([PCBs] >2 mg per kg and [PCBs] <50 mg per kg).	M100	3082			•3Z	III	7153	47

Notes:
C1 Combustible Liquids are not classified as dangerous goods for transport purposes. No placarding is required by this Code on a portable tank or tank vehicle transporting only C1 liquid. However, industry practice is often to display “Combustible Liquid” in the area normally used for placarding a tanker.

 **GHS08 – Health Hazard:** Chronic health hazards; this includes aspiratory and respiratory

REMEMBER

RESIST RUSHING IN.
APPROACH INCIDENT FROM UPWIND.
STAY CLEAR OF ALL SPILLS, VAPOURS, FUMES, SMOKE and SUSPICIOUS SOURCES WITHOUT APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.

RESPONSE GUIDES

The following information has been obtained from the *SAA/SNZ HB 76:2010 Dangerous Goods – Initial Emergency Response Guide* to provide the information relevant to the emergency response procedures / protocols for materials commonly transported by Transgrid.

Attached Guides:

GUIDE 47	LOW TO MODERATE HAZARD SUBSTANCES
HAZARDS	
Fire or explosion	• May burn but do not ignite readily. • Runoff may pollute waterways. • Fire may produce irritating, toxic, and/or corrosive fumes. • Containers may explode when heated.
Health	• Inhalation or contact with substance may be harmful. • Inhalation of asbestos dust may damage the lungs. • Runoff from fire control or dilution water may pollute waterways. • Substances may be stored or transported hot – Contact with substance may result in severe burns.
PROTECTIVE CLOTHING	
	• Wear SCBA and chemical splash suit. • SCBA and structural firefighter's uniform may provide limited protection.
PUBLIC SAFETY	
	• Spill or leak area should be isolated immediately for at least 10 m in all directions. • Keep unauthorised personnel away. • Keep upwind and to higher ground.
Evacuation	**Fire** • When a large quantity of this material is involved in a major fire, consider initial evacuation of areas within 100 m in all directions.
EMERGENCY RESPONSE	
Fire	**Small fire** • Use dry chemical, CO_2, water spray or foam. **Large fire** • Use water spray, fog or foam. • If safe to do so, move undamaged containers from fire area. • Cool containers with flooding quantities of water until well after fire is out. **Fire involving tanks** • Withdraw immediately in case of rising sound from venting safety devices or discolouration of tank. • ALWAYS stay away from tank ends.
Spill or leak	• Do not touch or walk through spilled material. • Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. • Water spray may be used to knock down or divert vapour clouds. • Prevent dust cloud. • Avoid inhalation of asbestos dust. • **SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.**
First aid	• Remove victim to fresh air – Apply resuscitation if victim is not breathing – Administer oxygen if breathing is difficult. • Remove contaminated clothing and shoes immediately. • Remove material from skin immediately. • In case of contact with material, immediately flush skin or eyes with running water for at least 15 minutes. • Keep victim warm and quiet – Obtain immediate medical care. • Ensure that attending medical personnel are aware of the identity and nature of the product(s) involved, and take precautions to protect themselves.

GUIDE 48	POLYCHLORINATED BIPHENYLS (PCBs)
HAZARDS	
Fire or explosion	• May burn but do not ignite readily. • Fire may produce irritating, toxic, and/or corrosive fumes.
Health	• Inhalation or contact with substances may be harmful. • Runoff from fire control or dilution water may pollute waterways.
PROTECTIVE CLOTHING	
	• Wear SCBA and chemical splash suit. • Structural firefighter's uniform will provide limited protection.
PUBLIC SAFETY	
	• Spill or leak area should be isolated immediately for at least 15 m in all directions. • Keep unauthorised personnel away. • Keep upwind.
Evacuation	**Large spill** • Consider initial downwind evacuation of areas within at least 50 m. **Fire** • When a large quantity of this material is involved in a major fire, consider initial evacuation of areas within 100 m in all directions.
EMERGENCY RESPONSE	
Fire	**Small fire** • Use dry chemical, CO_2, water spray or foam. • If safe to do so, move undamaged containers from fire area. **Large fire** • Use water spray, fog or foam. • Cool containers with flooding quantities of water until well after fire is out. **Fire involving tanks** • Fight fire from protected position or use unmanned hose holders or monitor nozzles. • Dam fire control water for later disposal. • Withdraw immediately in case of rising sound from venting safety devices or discolouration of tank. • ALWAYS stay away from tank ends.
Spill or leak	• ELIMINATE all ignition sources (no smoking, flares, sparks or flames) within at least 50 m. • Do not touch or walk through spilled material. • Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. **Small spill** • Absorb with earth, sand or other non-combustible material and transfer to container. • **SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.**
First aid	• Remove victim to fresh air – Apply resuscitation if victim is not breathing – Administer oxygen if breathing is difficult. • Remove contaminated clothing and shoes immediately. • Remove material from skin immediately. • In case of contact with material, immediately flush skin or eyes with running water for at least 15 minutes. • Keep victim warm and quiet – Obtain immediate medical care. • Ensure that attending medical personnel are aware of the identity and nature of the product(s) involved, and take precautions to protect themselves.