OIL SPILL MANAGEMENT AND CONTINGENCY PLAN

### Haywards Substation

# TRANSPOWER CONTRACTOR MANAGED DOCUMENT

This document is the property of Transpower New Zealand Limited (“Transpower”). The preparation, content and management of this document is the responsibility of the designated Transpower contractors for the site.

## PURPOSE OF THE OIL SPILL MANAGEMENT AND CONTINGENCY PLAN

##  To provide particular information to assist Transpower contractors, subcontractors and other Transpower approved employees in the operation of oil spill equipment and the management of oil spill emergency responses at this site.

1. **DOCUMENT STATUS**

 The Oil Spill Management and Contingency Plan complements but does not take precedence over any Transpower standards, manufacturer's information or similar documents or any specific instruction from Transpower. The manual also complements contractor's work procedures and training information.

As a Transpower Contractor managed Document, the Oil Spill Management and Contingency Plan has to meet contract requirements for its preparation and management which include quality, content, current applicability and suitability to be passed on to a succeeding contractor.

 A copy of the Oil Spill Management and Contingency Plan must be retained and readily available on site to assist in meeting Transpower's and the contractors’ statutory obligations and to protect Transpower's assets.

1. **REFERENCES**

**TP.GS 54.01** Oil spill management

**TP.SS 05.10** Environmental management of existing assets

OIL SPILL EMERGENCY NOTICE

Ensure all Personnel are safe

MAJOR SPILL

If insufficient resources on site contact others who could assist. CONTACT LIST IN OIL SPILL MANAGEMENT AND CONTINGENCY PLAN

Use Contractor Oil Spill Kits. If insufficient use Transpower Oil Spill Kits.

Stop or limit the oil flow from source

Stop or limit the flow into any storm water drain or waterway

Contact: NGOC

Ph: (04) 563 8161

or 5555 (via TPSN)

Mop up and spread absorbent material over affected area to absorb oil

WASTE DISPOSAL PROCEDURE.

Please refer to Oil Spill Management & Contingency Plan

Oil Spill Accident report in the Oil Spill Management & Contingency Plan MUST be filled out.

If Contractor Oil Spill Kits are insufficient a Transpower Oil Spill Kit is located in a yellow ‘wheelie bin’ in the Pole 1 Converter Transformer area between the T8 and T9 cooling towers. Access to this kit can be obtained by acquiring an entry approval to the 110kV Switchyard and entering through the main personnel access gate. Another kit is located in a yellow ‘wheelie bin’ in the earthing equipment shed between T11 and the edge of the 220kV Switchyard near the 110kV Relay Room. Access to this kit can be obtained by opening the normally un-locked roller door to the Oil House from outside the switchyard.

The Oil Spill Management and Contingency Plan (OSMCP) for TRANSPOWER equipment at this site is located in the Haywards Pole 2 Records Room.

Please remember that Oil spill Accident Reports must be filled out and sent to the Transpower Service Delivery Manager

OIL FIRE EMERGENCY

**SCHEDULE OF HIGH RISK OIL AREAS**

**OIL FIRE**

Ensure all Personnel are safe

Call Emergency Services

( 111 )

Call National Grid Operating Centre

Ph: 04 563 5087

Is the fire on in service or isolated equipment?

In Service

**If it is safe to do so**:

Isolate the equipment from the network

Are skills & resources available to contain & fight the fire?

Out of Service

No

Wait for Fire Service & direct them to the fire

Yes

Stop oil flow at the source

Limit oil flow to storm water &/or waterways & contact Regional Council

Ph: 0800 496 734

Use NON-WATER extinguishers

Clean up oil and all affected areas

Oil Spill Accident Report

Dispose of oil & any waste

Areas of High Risk are identified in ‘TP.SS 05.10 Environmental management of existing assets’ under ‘Appendix B - Site Oil Management Requirements’ as:

1. Underground aquifers
2. Stormwater drains
3. Neighbours properties
4. Waterways

**Type of High Risk:** Northern storm water drain discharge into the Manor Park Stream.

**Location:** The open northern discharge point is located 5 metres down the bank below the access road which runs in front of the main Store Building. Run-off from a section of S.H.58 and the Store access road also discharges from the northern discharge point (without passing through the associated interceptor tanks). The discharge point area is designated as a legal road; however the discharge runs down to the Manor Park Stream within the bush clad Keith George Memorial Park (scenic reserve). The Manor Park Stream discharges into the Hutt River near Stokes Valley.

**Procedure:** Check to ensure that oil is not being discharged from the discharge point. If so, use ‘Matasorb’ absorbent pads and pillows to stop or limit the flow of oil from the discharge point. Contact the approved waste disposal agency as soon as possible to pump out the full interceptor tanks.

Please Remember: Oil Spill Risk Typically Increases When People Are

 Working on Equipment at the Site.

**PROTECTION AGAINST OIL DISCHARGE**

The greatest risk of contamination of the watercourses surrounding Haywards Substation comes from the many items of equipment in service at the substation which contain oil for electrical insulating purposes, detailed below in the ‘Inventory of Equipment Containing Oil’.

As all stormwater collected on the site passes through oil interception facilities, any spilt oil should be removed in the oil plate separator unit or contained in the oil interceptor tanks thereby preventing the risk of contamination of local rivers and streams.

**1.0 PRIMARY SPILL CONTAINMENT**

In the event of a major oil spill the following basic steps are advised, although the location and nature of the spill may require a different sequence to that detailed:

1. Attempt to halt or reduce the leakage at the source if possible. The Transpower Oil Spill Kit contains ‘Plug N Dike’ compound which can be used as a temporary means of plugging leaking tanks or containers.
2. Prevent the spilt oil from entering the station stormwater system, by closing off the isolation valves within the bunded area if applicable (see Subsection 2.0 below), or by blocking the entrance to nearby drains.
3. If the oil spill occurs outside a bunded area, attempt to contain the spill by using the ‘Matasorb’ sock from the Transpower Oil Spill Kit or similar means to enclose the oil and prevent it escaping.
4. Once the spilt oil has been contained it can be soaked up using ‘Matasorb’ absorbent material and Castrol ‘Mop’ oil absorbent granules. If a large volume of oil has been spilt contact the local waste oil disposal company detailed in the Contact List (Waste Disposal agency) to arrange for the oil to be pumped directly into a road tanker for approved disposal.
5. When all the oil has been soaked up, the materials used to achieve this should be placed in plastic bags for safe disposal. If a large amount of oil has contaminated the soil, the effected material may need to be removed for disposal at an approved landfill.

2.0 major items of plant

**2.1 Standard Protection for Transformers**

The items of plant which contain the largest volumes of oil at Haywards are power transformers. All the power are surrounded by bund walls, which in the event of a major spillage will contain the spilt oil and in the case of the larger units, feed it directly into the station’s storm water drainage system for ultimate collection in the appropriate downstream oil interceptor tank (or removal by the oil plate separator if applicable).

The bunded areas surrounding the largest transformers have oil shut-off valves which should be immediately closed in the event of a major oil spillage, to isolate the area from the storm water drainage system.

This allows the leaked oil to be more easily pumped out into suitable vessels. These shut-off valves shall also be closed when maintenance is carried out on the transformer units, thereby reducing the risk of any spilt oil entering the storm water system.

In addition to bunding, all of the major transformers (excluding the smaller local service units) have low oil level alarms which are initiated if the oil level in any of the units drops below a pre-determined point.

If a low level alarm is detected in the Regional Operating Centre at Haywards, maintenance operating staff should be notified and sent to investigate the cause.

**2.2 Pole 1 Converter Transformers (T7, T8, T9, T10)**

In addition to the standard protection detailed above, the Pole 1 converter transformers have special boxes containing the oil absorbing material ‘Matasorb’. These boxes fit below each of the sump grills in the bunded areas surrounding the transformer units. In the event of any minor oil spill this material will trap the oil, while letting water pass through into the station’s storm water system.

The condition of the ‘Matasorb’ should be checked regularly by maintenance operating staff and replaced with fresh material when found to be contaminated with oil. The ‘Matasorb’ shall also be replaced following any major oil spill.

**2.3 Pole 2 Converter Transformers (T23)**

The bunded areas around the three in-service Pole 2 converter transformers and around the spare unit which is located outside the transformer enclosures are filled with a course grade of rock (40 - 60mm in size).

Each of the four bunded areas includes a sump chamber with a steel cover plate, at the eastern end (Hutt River side) which houses an automatic AFL OSV-12 oil stop valve (4 valves in total).

Each of these oil stop valves incorporates a special float which is set to allow water to pass through the valve and into the station’s storm water system. Because oil has a lower specific gravity than water, if any oil enters the float chamber of the valve, the float drops and thereby shuts the valve off.

In the event of a major oil spill from any of the Pole 2 converter transformers some oil will pass through the valves before they can close off fully, however this should end up trapped in the Pole 2/ Switchyard B oil interceptor tanks on its way through the station’s storm water system.

Detailed information on the AFL oil stop valves is contained in ABB Binder D-801/H7 (copy held in Haywards Pole 2 Records Room).

3.0 minor items of plant

The minor items of plant (instrument transformers and local service transformers) located in the switchyards at Haywards Substation contain electrical insulating oil, are detailed below in the ‘Inventory of Equipment Containing Oil’, along with the major plant items.

Because of the relatively small volumes of oil contained in these items, they are not usually surrounded by bund walls or provided with dedicated connections to the station’s storm water system.

If oil spillage from any minor item of plant should occur every attempt should be made to collect and mop up the spilt oil following the procedures detailed above in Section 1.

The coarse rock ground cover found in the switchyards at Haywards should assist in containing the oil in the immediate area of any spill, and if any oil does run away, it should find its way to one of the general drainage sumps on site and into the station’s storm water system.

4.0 DESCRIPTION OF oil interceptor tanks

The oil interceptor tanks at Haywards work by allowing any entrapped oil to separate out of the run-off water due to the different specific gravities of the two fluids. The run-off water enters the successive tanks at a high level and is drawn off from a low level, thereby allowing the lighter oil to rise to the surface while the heavier water flows through the system and away.

The three banks of oil interceptor tanks at Haywards are routinely inspected on a 2 monthly basis by maintenance operating staff, for oil build up and general operational condition.

The location and catchment areas of the three banks of oil interceptor tanks are as follows:

1. Northern Discharge Interceptor Tanks - (2 x 22,700 litre tanks) Located at the bottom of the concrete steps which lead down to the main entrance of the Store Building. The catchment area consists of the Condenser Hall, 110kV Relay Room, Office block, plus the immediate surrounding areas.
2. Pole 1/ Switchyard A Interceptor Tanks - (6 x 22,700 litre tanks) Located in an enclosed area on the southern side of the access road which leads down to the Pole 2 Valve Hall. The catchment area consists of the 110kV and 220kV Switchyards which comprise AC Switchyard A, plus the Pole 1 Filter Banks and Converter Transformers, Pole 1 DC Switchyard, and the Pole 1 Valve Hall and immediate surrounding areas.

Note: Run-off from AC Switchyard A and Pole 1 Converter Transformers passes through the Oil Buffer Chamber and Plate Separator Unit (described below in Sections 5 & 6) before passing through these interceptor tanks.

1. Pole 2/ Switchyard B Interceptor Tanks - (2 x 22,700 litre tanks) Located on the southern side of the Pole 2 Valve Hall access road adjacent to the line hardware storage yard at the end of Switchyard B. The catchment area consists of the Pole 2 DC Switchyard, AC Switchyard B, plus the Pole 2 Valve Hall and immediate surrounding areas.

If oil is detected in any of the tanks, arrangements should be made for the contents to be pumped out into a road tanker and transported away for recycling or approved disposal. See details of the approved waste disposal agency below in ‘Contact List - When An Oil Spill Has Occurred’.

Drawings of oil interceptor tanks located at Haywards Substation are contained in Transpower drawing folder section HAY/1F2 (copy held in Haywards Control Room).

Drawings of oil interceptor tanks located at Haywards Substation are contained in Transpower drawing folder section H4/1B5 (copy held in Haywards Pole 2 Records Room).

5.0 DESCRIPTION OF oil buffer chamber

The concrete oil buffer chamber is located at the eastern end of Filter Bank 2 in the 110 kV Switchyard at Haywards and receives storm water run-off from the 110kV and 220kV Switchyards which comprise AC Switchyard A, plus the Pole 1 Converter Transformers.

It is designed to contain the volume of oil from the largest transformer situated within it’s catchment area (T1/T2/T5 at 83,550 litres), plus contain the first 14 minutes of flow from a 1 in 2 year storm (calculated as 23,000 litres). The first flush of water during a storm is the most likely to contain oil.

Stormwater flow in excess of the capacity of the oil buffer chamber will bypass the oil plate separator unit located below the buffer chamber and re-enter the station storm water lines which feed the Pole 1/ Switchyard A Interceptor Tanks.

The design of the buffer chamber incorporates an under-flow weir to prevent the discharge of oil with the excess water.

6.0 DESCRIPTION OF oil plate separator

The oil plate separator is a proprietary unit supplied by Sepa Waste Water Treatment (NZ) Ltd. This unit has a capacity of 60,000 litres per hour with a discharge water quality of less than 20 mg/litre hydrocarbon content. The unit incorporates an integral oil storage tank of 5000 litres capacity. Water is discharged from the unit into the station storm water lines which feed the Pole 1/ Switchyard A Interceptor Tanks.

The contents of the unit’s oil storage tank are inspected periodically by maintenance operating staff and any accumulated oil should be disposed of in a similar manner to that retrieved from the station oil interceptor tanks.

The operation of the oil plate separator unit is detailed in the operation and maintenance manual, a copy of which is held in the Haywards Regional Operating Centre.

INVENTORY OF EQUIPMENT CONTAINING OIL

Station: Haywards AC Last Updated: 2022-08-11

| Device Position | Number of units and Description | Volume of Oil¹ | Bunded Area | Comments |
| --- | --- | --- | --- | --- |
| CT408 | 3 x Nissin FGCH-200 3150A | 1,470 |  | 3 x 490 ℓ ? |
| CT418 | 3 x Nissin FGCH-200 3150A | 1,470 |  | 3 x 490 ℓ ? |
| CT428 | 3 x Nissin FGCH-200 3150A | 1,470 |  | 3 x 490 ℓ ? |
| CT532 | 3 x Nissin FGCH-200 2500A | 1,380 |  | 3 x 460 ℓ ? |
| CT552 | 3 x Nissin FGCH-200 2500A | 1,380 |  | 3 x 460 ℓ ? |
| CT572 | 3 x Nissin FGCH-200 2500A | 1,380 |  | 3 x 460 ℓ ? |
| CT592 | 3 x Nissin FGCH-200 2500A | 1,380 |  | 3 x 460 ℓ ? |
| CVT532 | 3 x Trench TEIMF 230SX | 375 |  | 3 x (60+65 ℓ) |
| CVT552 | 3 x Trench TEIMF 230SX | 375 |  | 3 x (60+65 ℓ) |
| CVT572 | 3 x ABB CPSE 245 F-C | 336 |  | 3 x 112 ℓ OBIEE |
| CVT592 | 3 x ABB CPB 245 | 384 |  | 3 x 115 kg |
| CT622 | 3 x Nissin FGCH-200 2500A | 1,380 |  | 3 x 460 ℓ ? |
| CVT16 Rø | 1 x Trench TEMP 230SX | 92 |  | 1 x 82.6 kg |
| T5 | Tyree 220/110/11kV 216MVA | 83,550 | Yes |  |
| ET5 | Tyree 11kV 16kVA | 325 |  |  |
| T12 | Hyundai 110/33/11kV 30/60MVA | 38,200 | Yes | Type: TL3145 |
| T11 Spare | 1 x Hawker Siddeley TOD8009 | 9,843 | Yes | 110/33kV 10MVA |
| T11 | Hyundai 110/33/11kV 30/60MVA | 38,200 | Yes | Type: TL3145 |
| CT462 | 3 x Nissin FGCH-200 2500A | 1,380 |  | 3 x 460 ℓ ? |
| CVT462 Rø | 1 x Koncar VCU-245 | 73 |  | 1 x (40+26) kg |
| T2 | Tyree 220/110/11kV 216MVA | 83,550 | Yes |  |
| ET2 | Tyree 11kV 16kVA | 325 |  |  |
| CT442 | 3 x Nissin FGCH-200 2500A | 1,380 |  | 3 x 460 ℓ ? |
| VT14 Rø | 1 x Arteche UMV245E | 217 |  | 195 kg |
| T1 | Tyree 220/110/11kV 216MVA | 83,550 | Yes |  |
| ET1 | Tyree 11kV 16kVA | 325 |  |  |
|  |  |  |  |  |
| VT1012 | 3 x ABB EMFC 36 | 24 |  |  |
| VT1052 | 3 x Arteche UZK-36 | 60 |  | 3 x 18 kg |
|  |  |  |  |  |
| CT58 | 3 x Nissin FGCH-100 2500A | 900 |  | 3 x 300 ℓ ? |
| VT57 | 3 x Arteche UTD-123 | 207 |  | 3 x 62 kg |
| VT47 | 3 x Arteche UTD-123 | 207 |  | 3 x 62 kg |
| CT72 | 3 x Nissin FGCH-100 2500A | 900 |  | 3 x 300 ℓ ? |
| CT112 | 3 x Nissin FGCH-100 2500A | 900 |  | 3 x 300 ℓ ? |
| CT132 | 3 x ABB IMBD 145 A5 | 432 |  | 3 x 130 kg |
| CT192 | 3 x Nissin FGCH-100 2500A | 900 |  | 3 x 300 ℓ ? |
| CT212 | 3 x Nissin FGCH-100 2500A | 900 |  | 3 x 300 ℓ ? |
| CT258 | 3 x Nissin FGCH-100 2500A | 900 |  | 3 x 300 ℓ ? |
| CT272 | 3 x ABB IMBD 145 A5 | 432 |  | 3 x 130 kg |
| VT267 | 3 x Arteche UTD-123 | 234 |  | 3 x 70 kg |
| CT292 | 3 x Nissin FGCH-100 2500A | 900 |  | 3 x 300 ℓ ? |
| VT297 | 3 x ABB EMFC145 | 282 |  | 3 x 85 kg |
| CT262 | 3 x ABB IMB 123 A5 | 216 |  | 3 x 65 kg |
| CT222 | 3 x Arteche CA-123 | 267 |  | 3 x 80 kg |
| CT202 | 3 x ABB 587006 | 720 |  |  |
| CT182 | 3 x ABB IMBD 145 A5 | 432 |  | 3 x 130 kg |
| CT162 | 3 x ABB IMB 123 | 216 |  | 3 x 65 kg |
| VT162 | 3 x Arteche UTD-123 | 234 |  | 3 x 70 kg |
| CT142 | 3 x ABB IMB 123 | 216 |  | 3 x 65 kg |
| VT142 | 3 x Arteche UTD-123 | 234 |  | 3 x 70 kg |
| CT122 | 3 x ABB IMB 123 | 216 |  | 3 x 65 kg |
| VT122 | 3 x Arteche UTD-123 | 234 |  | 3 x 70 kg |
| CT102 | 3 x ABB IMB 123 | 216 |  | 3 x 65 kg |
| VT102 | 3 x Arteche UTD-123 | 234 |  | 3 x 70 kg |
| CT82 | 3 x Nissin FGCH-100 2500A | 900 |  | 3 x 300 ℓ ? |
| CT62 | 3 x ABB 587006 | 720 |  |  |
| CT42 | 3 x Arteche CA-123 | 267 |  | 3 x 80 kg |
| T7 | Pauwels ORV 65/230 110/11kV | 24,600 | Yes | 80MVA |
| T8 | Pauwels ORD 80/230 110/11kV | 24,600 | Yes | 80MVA |
| T9 | Pauwels ORD 80/230 110/11kV | 24,600 | Yes | 80MVA |
| T10 | Pauwels ORD 80/230 110/11kV | 24,600 | Yes | 80MVA |
| LS1 | ABB DYN11 11kV/415V 500kVA | 565 |  |  |
| LS2 | ABB DYN11 11kV/415V 500kVA | 565 |  |  |
| ET C1 | Tyree 11kV/323V 9kVA | 105 |  |  |
| ET C2 | Tyree 11kV/323V 9kVA | 105 |  |  |
| ET C3 | Tyree 11kV/323V 9kVA | 105 |  |  |
| ET C4 | Tyree 11kV/323V 9kVA | 105 |  |  |
|  |  |  |  |  |

¹Note: Quantities shown are totals (litres). Specific Gravity of 0.9 assumed for calculations from weights

Station: Haywards DC Last Updated: 2020-08-19

| Device Position | Number of units and Description | Volume of Oil¹ | Bunded Area | Comments |
| --- | --- | --- | --- | --- |
| S4.10DC96-T6C | 3 x Trench TCVT 245 | 202 |  | 3 x 67.3 ℓ |
| S4.P2-T1.Z1.T1 | 3 x ABB CPEE 245 F-C | 300 |  | 3 x 100 ℓ ? |
| S4.WA-Z1.T2 | 3 x ABB CPEE 245 F-C | 300 |  | 3 x 100 ℓ ? |
| S4.WA-Z2.T2 | 3 x ABB CPEE 245 F-C | 300 |  | 3 x 100 ℓ ? |
| CT682 | 3 x Trench IOSK 245 | 750 |  | 3 x 250 ℓ |
| CT882 | 3 x Nissin FGCH-200 1250A | 1,380 |  | 3 x 460 ℓ ? |
| S4.10DB66-T1 | 3 x Trench IOSK 245 | 750 |  | 3 x 250 ℓ |
| S4.10DB92-T1 | 3 x Trench IOSK 245 | 750 |  | 3 x 250 ℓ |
| S4.10DC96-T1 | 3 x Trench IOSK 245 | 750 |  | 3 x 250 ℓ |
| S4.10DC96.A-T11 | 3 x Arteche CA-170 | 231 |  | 3 x 77 ℓ |
| S4.10DC98-T1 | 3 x Trench IOSK 245 | 750 |  | 3 x 250 ℓ |
| S4.10DC98.A-T11 | 3 x Arteche CA-170 | 231 |  | 3 x 77 ℓ |
| S4.10DC98.B-T11 | 3 x Arteche CA-170 | 231 |  | 3 x 77 ℓ |
| S4.10E04-T1 | 3 x Arteche CA-123 | 216 |  | 3 x 72 ℓ |
| S4.10E04.B-T11 | 3 x Arteche CA-123 | 216 |  | 3 x 72 ℓ |
| S4.10E22-T1 | 3 x Arteche CA-123 | 216 |  | 3 x 72 ℓ |
| S4.10E22.A-T11 | 3 x Arteche CA-123 | 216 |  | 3 x 72 ℓ |
| S4.10E22.B-T11 | 3 x Arteche CA-123 | 216 |  | 3 x 72 ℓ |
| S4.P1-Z1.T1 | 1 x ABB IMBD 36 A1 | 67 |  | 1 x 60 kg |
| S4.P1-Z1.T2 | 1 x ABB IMBD 36 A1 | 67 |  | 1 x 60 kg |
| S4.P2-T1.T2 | 3 x ABB IMBD 245 A5 | 900 |  | 3 x 270 kg |
| S4.P2-Z1.T1 | 1 x ABB IMBD 36 A1 | 67 |  | 1 x 60 kg |
| S4.P2-Z1.T2 | 1 x ABB IMBD 36 A1 | 67 |  | 1 x 60 kg |
| S4.WA-Z1.T1 | 3 x ABB IMBD 245 A5 | 900 |  | 3 x 270 kg |
| S4.WA-Z1.Z1.T1 | 3 x ABB IMBD 145 A2 | 282 |  | 3 x 85 kg |
| S4.WA-Z1.Z2.T1 | 3 x ABB IMBD 145 A2 | 282 |  | 3 x 85 kg |
| S4.WA-Z2.T1 | 3 x ABB IMBD 245 A5 | 900 |  | 3 x 270 kg |
| S4.WA-Z2.Z1.T1 | 3 x ABB IMBD 145 A2 | 282 |  | 3 x 85 kg |
| S4.WA-Z2.Z2.T1 | 3 x ABB IMBD 145 A2 | 282 |  | 3 x 85 kg |
| S4.P2-T2 | 1 x Holec TDC 350 | 1,278 |  | 1 x 1150 kg |
| HAY-SC1-ETC-1 | Tyree 9kVA ET | 105 |  |  |
| HAY-SC1-ST-1 | ASEA ET | 100 |  | 100 ? no details |
| HAY-SC10-ETC-10 | Turnbull & Jones 10kVA ET | 200 |  |  |
| HAY-SC10-XT-10 | THT GFN 1M3/G (excitation) | 100 |  | 100 ? no details |
| HAY-SC2-ETC-2 | Tyree 9kVA ET | 105 |  |  |
| HAY-SC2-ST-2 | TMC Starting Transformer | 100 |  | 100 ? no details |
| HAY-SC3-ETC-3 | Tyree 9kVA ET | 105 |  |  |
| HAY-SC4-ETC-4 | Tyree 9kVA ET | 105 |  |  |
| HAY-SC7-ETC-7 | Turnbull & Jones 10kVA ET | 200 |  |  |
| HAY-SC7-XT-7 | THT GFN 1M3/G (excitation) | 100 |  | 100 ? no details |
| HAY-SC8-ETC-8 | Turnbull & Jones 10kVA ET | 200 |  |  |
| HAY-SC8-XT-8 | THT GFN 1M3/G (excitation) | 100 |  | 100 ? no details |
| HAY-SC9-ETC-9 | Turnbull & Jones 10kVA ET | 200 |  |  |
| HAY-SC9-XT-9 | THT GFN 1M3/G (excitation) | 100 |  | 100 ? no details |
| HAY-TF-ET22 | Tyree 300kVA | 720 |  |  |
| HAY-TF-ET24 | Fortune Electric Co | 100 |  | 100 ? no details |
| HAY-TF-T22 | Tyree 220/11kV 10MVA | 21,900 | Yes |  |
| HAY-TF-T24 | Siemens DOR 11 220/11kV | 100 |  | 100 ? no details |
| NOP-HAY-HVDC | CANZAC | 100 |  | 100 ? no details |
| S4.10J01-T7 | Etel 25kV/400V 160kVA | 465 |  | Local Service |
| S4.10T31 | Siemens DO 63000 / 220E | 33,000 | Yes |  |
| S4.10T31 Spare | Siemens DO 63000 / 220E | 33,000 | Yes |  |
| S4.10T36-T36 | Fortune 11kV 1.6MVA | 1,400 |  | Auxiliary Transformer |
| S4.10T37-T37 | Fortune 11kV 1.6MVA | 1,400 |  | Auxiliary Transformer |
| S4.11T01-T25 | 4 x Siemens EFPH8454 | 277,200 | Yes | Converter Tf  |
| S4.P2-AL.T1 | ABB 11kv/400V 1.6MVA | 1,400 |  | Local Service |
| S4.P2-AL.T2 | ABB 11kv/400V 1.6MVA | 1,400 |  | Local Service |
| S4.P2-T1.T1 | ABB TC A65 217 MVA | 338,800 | Yes | Converter Tf |
| S4.10DB66-T6 | 3 x Trench VEOT 245 | 405 |  | 3 x 135 ℓ |
| S4.10DB92-T6 | 3 x Trench VEOT 245 | 405 |  | 3 x 135 ℓ |
|  |  |  |  |  |

CONTACT LIST – WHEN AN OIL SPILL HAS OCCURRED

|  |  |  |
| --- | --- | --- |
| EMERGENCY SERVICES | Ambulance, Fire, Police | Dial: Prefix for outside line then 111  |
| CONTRACTORS PERSONNEL | Name: Lee TukukinoMaintenance SupervisorName: Hagan BurgessDelivery Manager | Mobile: (027) 266 4494Mobile: (027) 4262 572 |
| TRANSPOWER PERSONNEL | NGOC Name: Darryn Welham Service Delivery Manager | Phone: (04) 563 5087TPSN: 5555Phone: (06) 590 7691Mobile: (021) 243 0014 |
| OTHER (e.g. another Contractor or Generator in the vicinity that could be called in to help) | Name: Lignesh ArunasalumVentia OperationsManager Central | Teams: (06) 358 4965Mobile: (027) 278 4135 |
| WASTE DISPOSAL AGENCY | J.B.s Environmental Limited | Phone: (06) 367 5075Freephone: 0800 44 26 28 |

If you are unable to contact the NGOC or Transpower Service Delivery Manager and the oil spill has entered waterways contact the Regional Council immediately.

|  |  |  |
| --- | --- | --- |
| REGIONAL COUNCILGreater Wellington Regional Council | Pollution Hotline 24hrs0800 496 734 | Phone: (04) 384 5708 |

Any contact with the Media will be made by Transpower.

WASTE DISPOSAL PROCEDURE

Pack all contaminated material into bags/drums.

**To dispose of contaminated oil.**

## Contact: J.B.s Environmental Limited

**Ph: 06 367 5075**

## Ph: 0800 44 26 28

To dispose of oil contaminated waste.

## Contact: J.B.s Environmental Limited

**Ph: 06 367 5075**

**Ph: 0800 44 26 28**

Check kit and replace any material required.

NZ Safety Blackwoods

Ph: **0800 660 660**

Record Number …………

OIL SPILL ACCIDENT REPORT

(for spills greater than 5 litres)

Contractor:……………………………….. Site:…………………………………………………..

Date of Spill:……………………………… Time of Spill:………………………………………..

Persons on Site at Time of Spill:……………………………………………………………………….

……………………………………………………………………………………………………………

Describe the Incident – include reason WHY there was an oil spill:

Was there a fire? Yes/No

Did Oil escape into waterways? Yes/No

If yes, what was the name of the waterway? ………………………………………………………….

If Oil escaped into waterways, what were the waterway levels? Low/Typical of that waterway/High

What were the weather conditions? ………………………………………………………………….

…………………………………………………………………………………………………………..

Estimated Amount of Oil Spilled: …………... Estimated Amount of Oil Recovered: ……………

Describe Clean Up and Corrective Action:

Notification Schedule:

|  |  |  |
| --- | --- | --- |
| Organisation | Name of Person Notified | Time Notified |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Completed By:

Print Name: Position:

Signed: Date:

Please forward this form to the Transpower Service Delivery Manager.