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ANNEXURE B TO THE ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR)

SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) PLAN

For Resins, Hardeners, Fibreglass, Chemicals, Fuels and Oils

For

PROPOSED DEVELOPMENT OF KINETIC CATAMARANS INDUSTRIAL FACILITY ON ERF 1339, AS WELL AS DEVELOPMENT / REDEVELOPMENT OF THE SOUTH AFRICAN SEA CADET CORPS INFRASTRUCTURE ON ERF 1316, KNYSNA, WESTERN CAPE

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I, ***Jessica Christie***, of Eco Route Environmental Consultancy, in terms of Regulation 13 of the Environmental Impact Assessment Regulations, 2014 (as amended), hereby declare that I provide services as an independent Environmental Assessment Practitioner ***(EAPASA Reg: 2019/1855)*** and receive remuneration for services rendered for undertaking tasks required in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014 (as amended). I have no financial or other vested interest in the project.

EAP SIGNATURE:_____

1. INTRODUCTION

1.1 Status of this Annexure

This Spill Prevention, Control and Countermeasure (SPCC) Plan is a binding annexure to the Application Phase Environmental Management Programme (EMPr) prepared by Eco Route Environmental Consultancy for the proposed Kinetic Catamarans yacht manufacturing facility and South African Sea Cadet Corps redevelopment on Erven 1339 and 1316, Knysna. It must be read in conjunction with the parent EMPr and Annexure A (Stormwater Pollution Prevention Plan) and forms part of any Environmental Authorisation (EA) granted by the Department of Forestry, Fisheries and the Environment (DFFE).

Non-compliance with this SPCC Plan shall be treated by the Environmental Control Officer (ECO) as non-compliance with the EMPr and dealt with in terms of the EMPr enforcement procedure.

1.2 Purpose

The purpose of this SPCC Plan is to set out a structured, risk-based framework to prevent, contain and respond to spills of hazardous and polluting substances handled at the proposed Kinetic Catamarans facility. Particular focus is placed on substances of greatest concern in a fibreglass-resin yacht manufacturing context, namely:

- Fuels and combustibles (diesel, petrol, paraffin, LPG).
- Lubricants and hydraulic fluids (engine oils, transmission fluids, gear oils).
- Resin systems (polyester, vinylester and epoxy resins; methyl ethyl ketone peroxide and other peroxide hardeners; cobalt accelerators).
- Solvents and cleaners (acetone, styrene, methyl ethyl ketone, mineral turpentine, alcohols, paint thinners, surface cleaners).
- Paints, varnishes, primers and gelcoats.
- Fibreglass mats, rovings, chopped strand, cured fibreglass off-cuts and dust.
- Caustic and acidic cleaning agents.

Given the site's immediate proximity to the Knysna Estuary and its location within a National Freshwater Ecosystem Priority Area (FEPA) and the Knysna Protected Environment, the consequences of an uncontrolled spill are potentially severe. The SPCC Plan therefore adopts a precautionary, layered defence approach: prevent first, contain second, respond third.

1.3 Origin of the Commitments

This SPCC Plan gives effect to commitments made in the Comments and Response Report (Eco Route Environmental Consultancy, 2026) and to the recommendations of the appointed aquatic specialist (Upstream Consulting, 2025), who explicitly required that:

- "A comprehensive Spill Prevention, Control, and Countermeasure (SPCC) plan is crucial. This plan should include procedures for material handling, a detailed inventory of all chemicals and their locations, and regular inspections of storage containers and equipment for leaks."

It also addresses the comments received from:

- Department of Forestry, Fisheries and the Environment (DFFE) – Directorate: Oceans and Coast (Mr S Mbethe / Mr R Peter, 8 December 2025) – mitigation measures relating to floor drains, sewer connections, waste management and spill prevention.
- Department of Forestry, Fisheries and the Environment (DFFE) – Directorate: Biodiversity Conservation (Mr S Lekota, 12 December 2025) – binding EMPr requirements relating to estuarine protection.
- Garden Route District Municipality (Dr NS Viljoen, 6 January 2026) – Recommendation 2: "Resin, chemical and fibreglass waste spill-response plan."
- South African National Parks – Garden Route National Park (Dr V Weyer, 2 April 2026) – Conditions of approval relating to hazardous chemical and fuel storage and pollution sump catchpits.

1.4 Objectives

- Prevent any unintended release of regulated substances to soil, surface water, groundwater, air or the Knysna Estuary.
- Contain any release at source so that it does not migrate beyond a controlled, lined area.
- Respond rapidly, proportionately and traceably to any spill incident.
- Notify the appropriate persons and authorities within prescribed timeframes.
- Recover, classify and dispose of recovered material at a licensed facility.
- Investigate the root cause of every incident and amend prevention controls accordingly.
- Maintain a level of preparedness — through training, drills, equipment and inventory — that is proportionate to the risk profile of the operations.

1.5 Cross-Reference to Other Plans and Documents

- Annexure A – Stormwater Pollution Prevention Plan (SPPP) – referenced where the spill response interfaces with stormwater controls (catchpits, oil/water separators, pollution sump catchpits, vegetated buffer).
- Aquatic Biodiversity Site Sensitivity Verification and Impact Assessment (Upstream Consulting, 2025) – the technical basis for the operational mitigation measures contained herein.
- Site Development Plan (Mark Gale, 020-103 Rev H New SDP Yacht Factory-103 SDP DTA) – the spatial reference for the bunded chemical store, refuelling bay, pollution sump catchpits and firefighting water containment area.

2. REGULATORY AND POLICY FRAMEWORK

This SPCC Plan is to be read with the suite of legislative instruments and standards tabulated below. Where any conflict arises between this Plan and a binding statutory requirement, the statutory requirement prevails.

Statute / Instrument	Relevance to this SPCC Plan
National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)	Section 28 duty of care: any person who causes, has caused or may cause significant pollution or environmental degradation must take reasonable measures to prevent, minimise and rectify such pollution. Forms the legal basis for the entire SPCC Plan.
National Environmental Management: Waste Act, 2008 (Act 59 of 2008) (NEM:WA) and the National Norms and Standards for the Assessment of Waste for Landfill Disposal (GN R635 of 2013)	Classification, assessment and disposal of recovered spill material; requirement to use licensed hazardous-waste contractors and authorised disposal facilities.
National Environmental Management: Integrated Coastal Management Act, 2008 (Act 24 of 2008) (NEM:ICMA)	Section 69 prohibition on discharge of effluent that may have an adverse effect on the coastal environment. Notification of any spill that reaches or threatens the coastal environment.
National Water Act, 1998 (Act 36 of 1998) (NWA)	Section 19 duty of care to prevent and remediate water pollution. Section 20 emergency incident reporting.
National Environmental Management: Protected Areas Act, 2003 (Act 57 of 2003) (NEM:PAA) and Knysna Protected Environment Regulations (GN 1175 of 2009)	Site falls within the Knysna Protected Environment (Development Control Area). Spill incidents must be notified to SANParks as the management authority.
Occupational Health and Safety Act, 1993 (Act 85 of 1993) (OHSA) and General Safety Regulations / Hazardous Chemical Substances Regulations	Worker protection during handling, storage, transfer and emergency response involving hazardous chemicals.
National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004)	Volatile organic compound (VOC) emissions from solvents and resins; emergency atmospheric releases during fires or large evaporative spills.
SANS 10089 / SANS 10131 / SANS 1518 (Storage and handling of flammable liquids and chemicals)	Engineering and operational standards for fuel and chemical storage facilities, bunding, ventilation, separation distances, electrical compliance.
Knysna Municipality By-laws (Stormwater, Wastewater, Fire)	Local engineering and notification requirements; municipal Fire Authority sign-off for flammable storage.

3. SITE CONTEXT AND SENSITIVE RECEPTORS

3.1 Location

The development is located on Erven 1339 and 1316, Knysna, within the Lower Industrial Precinct, with the southern boundary lying immediately landward of the Knysna Estuary. The site is fully transformed and consists of paved hardstand, the existing Sea Cadets facility and an unlined drainage channel that traverses the former vehicle-testing ground and discharges via a culvert directly into the Knysna Estuary.

3.2 Sensitive Receptors

- The Knysna Estuary, mapped as a National Freshwater Ecosystem Priority Area (FEPA) and a National Wetland Inventory site of national importance.
- Saltmarsh and Zostera (eelgrass) beds along the southern boundary, sensitive to hydrocarbon and resin contamination.
- The Estuarine Functional Zone (EFZ) of the Knysna Estuary, extending over the property.
- The Knysna Protected Environment (NEM:PAA), with SANParks as the management authority.
- Estuarine birds, including species reliant on saltmarsh and mudflat foraging areas.
- Adjacent municipal sewer rising mains (350 mm and 375 mm) that traverse the site, the rupture or contamination of which has direct estuarine consequences.
- Workers, neighbours (Sea Cadets, adjacent industrial users) and the public utilising the lagoon-edge walkway.

3.3 Source–Pathway–Receptor Logic

All spill scenarios within this Plan have been characterised in terms of (a) the source (substance, container, activity), (b) the pathway by which the substance could reach a receptor (overland flow, catchpit, drainage channel, sewer, infiltration, evaporation), and (c) the receptor (estuary, soil, groundwater, sewer system, workers, neighbours). Engineered prevention and containment controls are designed to break the source–pathway–receptor chain at the earliest practicable point.

4. INVENTORY OF REGULATED SUBSTANCES

A live Hazardous Substances Inventory shall be maintained by the Facility Manager and reviewed monthly. The table below sets out the categories of substances expected on site and their indicative storage location. Each substance must have a current Safety Data Sheet (SDS) accessible at the point of storage and at the spill kit location.

Substance Category	Examples	Typical Storage Form	Primary Hazards	Indicative Storage Location
Petroleum fuels	Diesel, petrol, paraffin	Drums, jerry cans, fixed tanks (small)	Flammable, hydrocarbon contamination of soil and water	Designated refuelling bay; bunded fuel storage on hardstand
Liquefied petroleum gas (LPG)	Propane, butane (workshop heating, brazing)	Pressurised cylinders	Flammable, BLEVE risk under fire conditions	Outdoor LPG cage; ventilated; ≥ 3 m from ignition sources
Resin systems	Polyester resin, vinylester resin, epoxy resin	Drums (200 L), pails, cartridges	Flammable, irritant, sensitiser; contains styrene (VOC)	Bunded resin store, ventilated, north side of factory (away from estuary)
Catalysts / hardeners	Methyl ethyl ketone peroxide (MEKP), benzoyl peroxide, amine hardeners	Smaller containers, kept separate from resin and accelerator	Highly reactive, oxidiser, organic peroxide; explosive when mixed with accelerators	Separate, segregated cabinet (organic peroxide compartment); cool, ventilated
Accelerators	Cobalt naphthenate, cobalt octoate	Bottles	Reactive with peroxides; severe fire risk if mixed directly	Segregated cabinet, separate from catalysts
Solvents / cleaners	Acetone, styrene monomer, MEK, mineral turpentine, isopropyl alcohol, surface cleaners	Drums (200 L), pails, branded containers	Flammable, VOC, irritant, dermal sensitisers	Bunded solvent store, ventilated, with vapour recovery as appropriate
Paints, gelcoats, primers, varnishes	Two-part marine paints, gelcoats, primers	Tins (1–20 L), drums	Flammable; isocyanate hazard for some paint systems	Bunded paint store; segregated by chemistry
Lubricants and hydraulic fluids	Engine oil, transmission fluid, hydraulic fluid, grease	Drums, pails	Hydrocarbon contamination; persistence in soil and water	Lubricant cabinet on hardstand, drip trays in place
Caustic / acidic cleaners	Sodium hydroxide solutions, hydrochloric acid (boat hull cleaning)	Branded containers	Corrosive, reactive; pH impact on aquatic life	Separate corrosive store with eye-wash and shower
Fibreglass materials	Glass mat, woven roving, chopped strand, cured offcuts	Rolls, pallets, bins	Particulate (respiratory and dermal); persistent if released	Dry indoor store; offcuts in covered bins

Substance Category	Examples	Typical Storage Form	Primary Hazards	Indicative Storage Location
Compressed gases (workshop)	Oxygen, acetylene	Cylinders	Fire / explosion if mixed; oxidiser / fuel pair	Outdoor cylinder store, segregated, secured upright
Used / waste oils and contaminated absorbents	Recovered spill material, used filters, oily rags	Sealed labelled drums	Hydrocarbon contamination; awaiting hazardous-waste collection	Designated hazardous waste storage area on hardstand

4.1 Inventory Maintenance Requirements

- The Hazardous Substances Inventory shall record, for each substance: chemical name, trade name, category, supplier, hazard classification, maximum quantity on site, typical container size, storage location, and SDS revision.
- The inventory shall be updated within 24 hours of any new substance being introduced, removed or significantly altered in quantity.
- A printed master copy shall be held at the Facility Manager's office, an electronic copy held by the ECO, and a working copy held at each storage location.
- The inventory shall be made available to the Fire Authority, DFFE, SANParks and Knysna Municipality on request.

5. SPILL RISK SCENARIOS

The credible spill scenarios for this facility are tabulated below, together with the primary control assigned to break the source–pathway–receptor chain. Likelihood and consequence ratings are qualitative and subject to review by the ECO at the annual environmental audit.

Scenario	Most Likely Substance	Likelihood	Consequence Severity	Initial Risk	Primary Control
Drum drop / breach during delivery or movement	Resin, solvent, fuel	Possible	High (≥ 200 L escape)	High	Approved unloading procedure; trained operators; spill kit at point of transfer
Decanting / pouring spill	Resin, hardener, solvent	Probable	Low to medium (< 20 L)	Medium	Decanting only over drip tray on bunded surface; funnel with anti-splash; competent operator
Container rupture in storage	Any liquid	Improbable	Medium to high	Medium	Bunded store with 110% containment; routine inspections
Loss of containment from bunded area (overtopping, crack, drain blockage)	Mixed	Improbable	High	Medium	Quarterly bund integrity inspection; rainwater drainage rules
Refuelling spill at hardstand	Diesel, petrol	Possible	Low to medium	Medium	Designated refuelling bay; drip tray; spill kit < 5 m
Vehicle / plant leak (during construction or operation)	Diesel, hydraulic fluid, engine oil	Probable	Low (< 5 L per event)	Medium	Daily plant inspection; immediate removal of leaking units; absorbent mats at parked locations
Fire involving resin / solvent store	All flammables, plus firefighting water contaminated with above	Improbable	Very high	High	Bunded firefighting water containment; segregated chemistry storage; Fire Authority sign-off
Tank / IBC valve failure (slow leak)	Resin, solvent	Possible	Medium	Medium	Daily visual inspection; sealed valves; secondary containment
Catalyst / accelerator co-mingling (storage error)	MEKP + cobalt accelerator	Improbable	Very high (fire/explosion)	High	Strict storage segregation; locked cabinets; staff training; signage
Sewer rising main rupture	Sewage, but treated as a Tier-3 incident due to estuary proximity	Improbable	High	Medium	Joint Municipality inspection regime; emergency response in Annexure A §O-12
VOC release / odour incident (no liquid spill)	Solvents	Possible	Low	Low	Extraction with carbon filters; restricted high-VOC working hours; complaints register

Scenario	Most Likely Substance	Likelihood	Consequence Severity	Initial Risk	Primary Control
Workshop slop spill (gelcoat, paint)	Gelcoat, paint, mixed cleaners	Probable	Low	Medium	Sealed concrete floors with kerbed bunds; sweep-only cleaning; no floor drains to stormwater
Discovered legacy contamination during earthworks	Historic site contamination	Possible	Low to medium	Medium	Watching brief by ECO; immediate stop-work; testing prior to disposal

6. PREVENTION CONTROLS — CONSTRUCTION PHASE

The following controls shall be implemented from site establishment through to the issue of the Environmental Completion Statement by the ECO. They are binding on the Contractor, all sub-contractors, suppliers and visitors, and supplement (do not replace) the EMPr requirements.

Ref	Prevention / Control Measure	Responsibility	Frequency / Trigger
P-C-1	All hazardous substances delivered to site shall be received only at the designated unloading area on hardstand. No unloading is permitted within 10 m of any stormwater inlet, drainage channel or estuary edge.	Contractor	Continuous
P-C-2	All fuel, chemical, paint and lubricant storage shall be confined to a bunded facility of at least 110% of the largest single container volume, on impermeable surfacing, located as far from the estuary as practicable.	Contractor / ECO	Before delivery of any regulated substance
P-C-3	Refuelling of plant and vehicles shall take place only at the designated refuelling bay on hardstand, with drip trays in place and a spill kit within 5 m. Refuelling on vegetated, unpaved, or no-go surfaces is prohibited.	Contractor	Continuous; ECO monthly audit
P-C-4	Plant and vehicles found to be leaking shall be removed from site within 24 hours and replaced with serviceable units. Drip trays shall be placed under any stationary plant remaining overnight.	Contractor / ECO	Continuous
P-C-5	All hazardous substances shall be stored in their original, labelled containers. Containers without an intact label and SDS shall be quarantined and removed.	Contractor	Continuous
P-C-6	Storage of resins and catalysts shall be physically segregated. No accelerator (cobalt) shall be stored adjacent to a peroxide hardener (MEKP) or in the same containment.	Contractor / ECO	Continuous; weekly verification
P-C-7	All site personnel handling regulated substances shall complete induction training that includes the hazards, SDS use, spill response procedures and locations of spill kits and emergency equipment.	Contractor / ECO	Before mobilisation; refresher every 6 months
P-C-8	Spill kits sized to the substances on site shall be located at: the bunded storage facility, the refuelling bay, the construction camp, and within 25 m of any active hazardous-substance handling area.	Contractor	Continuous; spill kit contents inspected weekly
P-C-9	Daily housekeeping inspection shall include a visual check of all bunded areas for staining, leaks or accumulation of rainwater. Bund water shall be tested for visible sheen before discharge; if contaminated, removed by licensed waste contractor.	Contractor / ECO	Daily
P-C-10	Concrete trucks, mixers and batching equipment shall not be washed on site. A lined wash-out pit shall be provided; hardened residue removed to landfill. No alkaline cement wash-water to enter any drain or ground.	Contractor	Continuous

Ref	Prevention / Control Measure	Responsibility	Frequency / Trigger
P-C-11	Hazardous waste (used absorbents, contaminated soil, oily rags) shall be stored in sealed, labelled drums in a designated, bunded waste storage area. Disposal at a licensed hazardous-waste facility with manifests retained.	Contractor / ECO	Continuous; manifests reviewed weekly
P-C-12	Smoking, open flame and hot work shall not be permitted within 10 m of any flammable storage. Hot work permit required, signed by the ECO and Site Agent.	Contractor / ECO	As required (each hot work event)

7. PREVENTION CONTROLS — OPERATIONAL PHASE

These controls apply from commencement of operational activities and continue for the operational life of the facility. They supplement Section 8 of the EMPr and Annexure A (SPPP).

Ref	Prevention / Control Measure	Responsibility	Frequency / Trigger
P-O-1	All bulk resin, hardener, accelerator, paint, solvent, fuel and lubricant storage shall be located within the designated bunded chemical store on the northern side of the factory. The bund shall provide ≥ 110% containment of the largest single container.	Facility Manager	Continuous; monthly bund integrity check
P-O-2	Catalysts (MEKP and similar peroxides) and accelerators (cobalt naphthenate / octoate) shall be stored in separate, locked, ventilated cabinets in accordance with SANS 10089 and the manufacturer's SDS. Co-mingling is strictly prohibited.	Facility Manager	Continuous; weekly inspection
P-O-3	Solvents and high-VOC products shall be stored in a ventilated bunded store with vapour recovery (where required by SDS), away from ignition sources. Containers shall be kept closed when not in use.	Facility Manager	Continuous; daily inspection by area supervisor
P-O-4	FACTORY FLOOR DRAINS RULE (cross-reference Annexure A §O-5): no factory floor drain shall be connected to the stormwater system. All wash water and incidental floor spills shall be collected internally, directed to a bunded internal sump, and disposed of via a licensed liquid-waste contractor.	Facility Manager / ECO	Continuous; quarterly verification
P-O-5	All decanting, mixing and dispensing of regulated substances shall take place over drip trays positioned on impermeable, bunded surfaces. Funnels, anti-splash devices and grounding straps (for flammables) shall be used as appropriate.	Facility Manager	Continuous
P-O-6	Containers in active use (open drums, IBCs, jerry cans) shall be returned to bunded storage at the end of each working shift. No open containers shall remain in the workshop overnight.	Facility Manager	Daily
P-O-7	Lubricant storage shall use drums on drip trays in a covered, bunded cabinet. Routine plant servicing shall be carried out only at the designated maintenance bay.	Facility Manager	Continuous
P-O-8	Compressed gas cylinders shall be stored upright, secured by chain, segregated by chemistry (oxidisers separated from fuel gases by ≥ 6 m or a 30-minute fire-rated barrier), and located outdoors in a ventilated cage.	Facility Manager	Continuous; monthly inspection
P-O-9	All staff handling regulated substances shall be trained, tested and recorded as competent for each substance category. Refresher training shall be undertaken annually and after any substance-related incident.	Facility Manager / ECO	On induction; annually thereafter
P-O-10	Personal Protective Equipment (PPE) appropriate to the substance and SDS shall be provided, maintained and used. Eye-wash stations and safety showers shall be located within 10 seconds' walking distance of all chemical handling areas.	Facility Manager	Continuous; quarterly inspection of fixed safety equipment

Ref	Prevention / Control Measure	Responsibility	Frequency / Trigger
P-O-11	All bulk substance storage areas shall be fitted with intrusion alarms, smoke / VOC detectors as appropriate, and emergency lighting on backup power.	Facility Manager / Engineer	Continuous; biannual functional test
P-O-12	Pollution sump catchpits (cross-reference SPPP §O-4) located downstream of the chemical store and manufacturing area shall be inspected and serviced quarterly.	Facility Manager	Quarterly
P-O-13	Bunded firefighting water containment area on the southern side of the factory shall be maintained and tested annually as part of fire drills. Captured firefighting water shall be classified and disposed of as hazardous waste.	Facility Manager / Fire Authority sign-off	Annual inspection and test
P-O-14	Hazardous waste (used absorbents, expired chemicals, contaminated PPE) shall be collected in segregated, sealed, labelled containers in the designated hazardous-waste store, removed by a licensed contractor at intervals not exceeding 90 days, and disposed of at an authorised facility with manifests retained for 5 years.	Facility Manager	Continuous; manifests retained 5 years
P-O-15	An annual independent compliance audit shall verify the inventory, storage, segregation, signage, training records, drill records and incident records.	Independent Auditor / ECO	Annual

8. SPILL RESPONSE PROCEDURE

The spill response procedure has been designed to be clear, layered and proportionate. Every employee on site is required to know the first three steps. Designated Spill Response Personnel are required to know the entire procedure. Tier classification, notification timeframes and clean-up obligations are summarised below.

8.1 Tier Classification

Every spill shall be classified at first encounter as Tier 1, Tier 2 or Tier 3, using the criteria below. If in doubt, escalate one tier.

Tier	Description	Indicative Quantity	Internal Response	Authority Notification
Tier 1 — Minor	Contained within the secondary containment / drip tray; no risk of migration off site or to receptors	≤ 5 L hydrocarbon; ≤ 1 L resin/solvent; small drips or leaks	Trained operator with on-the-spot spill kit	ECO informed at end of shift; logged in incident register
Tier 2 — Moderate	Escapes secondary containment but remains within site; potential migration to drains; no impact yet on receptors	5–200 L hydrocarbon; 1–20 L resin/solvent; small fire suppression event	Designated Spill Response Team; deploy facility spill kits; close down stormwater inlets	ECO within 1 hour; DFFE Oceans & Coast and SANParks within 24 hours; written report within 14 days
Tier 3 — Major / catastrophic	Migration off site; entry into stormwater system, sewer, or estuary; fire involving flammables; injury	> 200 L hydrocarbon; > 20 L resin/solvent; uncontrolled fire; sewer rupture	Site Emergency Response Plan invoked; external responders called	Emergency services immediately; ECO, DFFE, SANParks, BOCMA, Knysna Municipality within 1 hour; full incident report within 14 days

8.2 Step 1 — Immediate Response (every employee)

1. Ensure personal safety. Do not attempt to act on a spill without appropriate PPE.
2. If safe to do so, stop the source: close a valve, right an upset container, switch off pump.
3. Alert the Spill Response Team and the Facility Manager (operational phase) or the Site Agent (construction phase) and the ECO.
4. Do not hose or wash the spill into any drain, channel or vegetated surface.
5. Evacuate the immediate area if vapours are detected or fire risk is present.

8.3 Step 2 — Containment

- Deploy spill kit absorbents (booms, pads, granular absorbent) at the leading edge of the spill, working from the receptor side back toward the source.
- If the spill is approaching a catchpit, kerb inlet or drainage channel, plug the inlet immediately with absorbent socks or sandbags.

- Build a temporary bund around the spill using granular absorbent, sand or earth.
- For resin / hardener / accelerator co-mingling: do not add water; do not mix with combustibles; use only inert absorbent and isolate.
- For acid / caustic spills: do not neutralise without consulting SDS; many neutralisations are exothermic. Contain and call in specialists if uncertain.

8.4 Step 3 — Notification

- Tier 1: Logged in the incident register; ECO informed at end of shift.
- Tier 2: ECO within 1 hour. DFFE Oceans & Coast (OCEIA@dffe.gov.za) and SANParks (vanessa.weyer@sanparks.org) within 24 hours. Written incident report within 14 days.
- Tier 3: Emergency services (10177 or 112), Knysna Municipal Fire Department, Knysna Municipality Operations, ECO, DFFE Oceans & Coast, SANParks, BOCMA all within 1 hour. Section 30 incident report (NEMA) within 14 days where applicable.
- Notification shall include: date, time, location, substance, estimated quantity, immediate cause, current status, response actions taken, and immediate further actions intended.

8.5 Step 4 — Clean-up and Recovery

- Recovered liquid spill product, contaminated absorbents, contaminated soil and contaminated PPE shall be packaged in sealed, labelled drums marked with the substance category and date.
- Contaminated soil shall be excavated to the depth of contamination penetration, classified in terms of NEM:WA, and disposed of at an authorised hazardous-waste facility.
- Contaminated stormwater infrastructure (catchpits, separators, traps) shall be drained, cleaned and inspected before being returned to service, by an appropriately qualified contractor.
- Disposal manifests shall be retained for at least 5 years and made available to DFFE on request.

8.6 Step 5 — Decontamination and Restoration

- All response equipment (booms, hoses, pumps, PPE) shall be decontaminated or disposed of as hazardous waste, depending on substance compatibility.
- Spill-affected ground surfaces shall be re-tested where contamination depth or extent is uncertain. Re-vegetation, where required, shall use locally indigenous species (cross-reference Estuarine Buffer Protection Plan).
- The site shall not be returned to active operations in the affected zone until the ECO is satisfied that residual risk is acceptable.

8.7 Step 6 — Investigation and Lessons Learned

- Every Tier 2 and Tier 3 incident shall trigger a documented root cause analysis within 14 days, undertaken by the ECO with the Facility Manager and any other affected parties.
- Findings, corrective actions and amended procedures shall be communicated to all relevant staff via toolbox talks and incorporated into refresher training.
- Recurring or trend-revealing incidents shall trigger a review of this SPCC Plan and, where necessary, of the parent EMPr.

9. SPILL KITS AND EMERGENCY EQUIPMENT

The minimum spill response equipment to be maintained on site is set out below. The Facility Manager shall maintain a spill kit register that records inspection dates, contents replaced, and identifying numbers for each kit.

Kit Type	Indicative Contents	Quantity / Capacity	Location
General-Purpose Spill Kit	Absorbent booms (×6), pads (×100), granular absorbent (25 kg), drum overpack, PPE (gloves, goggles, apron), inventory checklist	240 L absorbency	Bunded chemical store; refuelling bay; construction camp
Hydrocarbon-Specific Spill Kit	Oil-only booms and pads; granular oil-only absorbent; PPE	120 L absorbency	Refuelling bay; vehicle parking area
Chemical (HazMat) Spill Kit	Inert absorbent compatible with resin / solvent / acid / caustic; spill containment pool; chemical-resistant PPE; SDS folder	120 L absorbency	Resin and solvent storage area; manufacturing floor
Sewer / Drain Plug Kit	Drain plugs / mats, expandable bungs, sandbags	Sufficient to plug all on-site catchpits	Stormwater control cabinet
Eye-wash and Safety Shower	Plumbed unit; minimum 15-minute flow	Per fixed installation	Within 10 seconds' walk of all chemical handling
Fire Extinguishers	Dry powder, CO2 and foam (AFFF) as appropriate	Per Fire Authority sign-off	Bunded storage; refuelling bay; manufacturing floor
Fire Blankets	Per SANS 1851	Minimum 1 per workshop area	Manufacturing floor
Wind Sock	Standard outdoor wind direction indicator	1	Visible to entire site

9.1 Inspection of Spill Equipment

- Spill kit contents to be inspected weekly during construction and monthly during operations.
- Eye-wash and safety showers to be flushed weekly and tested quarterly.
- Fire extinguishers and fire blankets to be inspected monthly and serviced annually by an approved service provider.
- Wind sock to be replaced when faded, torn or no longer free-rotating.
- Inspection results to be logged in the Spill Equipment Register and signed by the inspector.

10. TRAINING, AWARENESS AND DRILLS

10.1 Induction Training

- All new site personnel (employees, contractors, sub-contractors) shall complete a documented environmental induction before commencing work, covering: site sensitivities, regulated substances, SPCC objectives, location of spill kits and emergency equipment, the immediate response steps in §8.2, and the reporting chain.
- Induction shall be repeated for any worker re-entering site after an absence of 6 months or longer.

10.2 Substance-specific Training

- Employees handling resins, hardeners, accelerators, solvents, paints, fuels, lubricants or compressed gases shall undergo training specific to those substance categories, including SDS interpretation, decanting, mixing, transfer, PPE and first aid.
- Training records shall record substance category, date, trainer, attendees, competency assessment outcome, and refresher due date.

10.3 Spill Drills

- A scheduled spill drill shall be conducted at least twice per year (Tier 2 scenario).
- A combined fire / spill / sewer-rising-main drill shall be conducted annually (Tier 3 scenario), in conjunction with the Knysna Municipal Fire Department where possible.
- Drill outcomes shall be documented, including time-to-containment, time-to-notification, gaps observed and corrective actions assigned.

10.4 Awareness

- Toolbox talks on spill prevention shall be held monthly during construction and quarterly during operations.
- Updated SDSs shall be circulated to relevant staff within 7 days of receipt.
- Lessons learned from incidents on this site or elsewhere shall be communicated promptly to all relevant staff.

11. ROLES AND RESPONSIBILITIES

Role	SPCC-specific Responsibility
Applicant / Holder of EA	Ultimate accountability for SPCC implementation; provides resources for spill prevention infrastructure, equipment and training; ensures Facility Manager and ECO have authority to enforce.
Environmental Control Officer (ECO)	Independent oversight; weekly inspections during construction; quarterly inspections during operations; first point of internal escalation for Tier 2 and Tier 3 incidents; investigation lead for root cause analyses; reporting to DFFE.
Facility Manager	Day-to-day implementation; maintenance of inventory, spill kits and emergency equipment; deployment of Spill Response Team; quarterly compliance reporting; coordination of drills.
Spill Response Team	Trained employees nominated to lead the on-the-ground response to Tier 2 incidents; competence verified annually; minimum 4 trained members per shift.
Engineer	Design and certification of bunding, separators, pollution sump catchpits, firefighting water containment; structural certification on rising-main loading.
Contractor (construction phase)	Implementation of construction-phase prevention controls; spill response in the construction phase; record-keeping; cooperation with the ECO.
Knysna Municipal Fire Department	External response to Tier 3 incidents; sign-off on flammable storage; participation in annual combined drills.
DFFE	Competent Authority; receives Tier 2 and Tier 3 notifications; receives Section 30 NEMA reports where applicable.
SANParks	Estuary management authority; receives Tier 2 and Tier 3 notifications; receives quarterly compliance reports.
BOCMA	Catchment Management Agency; receives Tier 3 notifications affecting water resources.
Knysna Municipality	Sewer infrastructure operator; emergency response coordination; receives Tier 3 notifications affecting municipal services.

12. RECORDS, REVIEW AND AMENDMENT

12.1 Records to be Maintained

- Hazardous Substances Inventory (live, reviewed monthly).
- Safety Data Sheet (SDS) folders at each storage location and at the Facility Manager's office.
- Spill Equipment Register (inspection log).
- Spill Incident Register (every incident, all tiers).
- Tier 2 and Tier 3 root cause analyses (retained 5 years).
- Notification correspondence (emails, letters) to DFFE, SANParks, BOCMA, Knysna Municipality (retained 5 years).
- Hazardous-waste disposal manifests (retained 5 years).
- Training records and competency assessments.
- Drill records and after-action reviews.
- Annual independent compliance audit report.

12.2 Review Triggers

- Annual review by the ECO and EAP.
- After every Tier 2 and Tier 3 incident.
- On any material change to operations (new substance, new process, increased throughput, new manufacturing area).
- On any amendment to the Environmental Authorisation, EMPr, applicable legislation or municipal by-laws.
- On the recommendation of the Knysna Municipal Fire Department, DFFE or SANParks.

12.3 Amendment Procedure

Amendments shall be drafted by the EAP, reviewed by the ECO, and submitted to DFFE for the record. Where amendments are material, they shall be submitted for DFFE concurrence and, where required, communicated to SANParks, the Fire Authority and Knysna Municipality.

12.4 Cross-cutting Reporting

- All Tier 2 and Tier 3 incidents shall be summarised in the Quarterly Compliance Report submitted to DFFE and SANParks (cross-reference SPPP §O-14).
- Aggregate spill statistics shall be summarised annually for the Annual Environmental Audit Report.

ACKNOWLEDGEMENT FORM

By signing below, the parties acknowledge that they have read, understood and undertake to comply with the requirements of this Spill Prevention, Control and Countermeasure (SPCC) Plan.

PROJECT: Proposed Development of Kinetic Catamarans Industrial Facility on Erf 1339, and Development / Redevelopment of the South African Sea Cadet Corps Infrastructure on Erf 1316, Knysna, Western Cape

DOCUMENT REFERENCE: 2026.26.09 – Application EMPr – Annexure B – Spill Prevention, Control and Countermeasure (SPCC) Plan

DFFE REFERENCE: TBC

APPLICANT (Kinetic Catamarans SA (Pty) Ltd): _____
Date: _____

CONTRACTOR (Construction Phase): _____ Date: _____

FACILITY MANAGER (Operational Phase): _____ Date: _____

SPILL RESPONSE TEAM LEAD: _____ Date: _____

ENVIRONMENTAL CONTROL OFFICER (ECO): _____ Date: _____

ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP): _____
Date: _____