

# Spill Prevention and Response Plan

Revision	Date	Details
1.0	24/01/2025	Issued for use



Operations on Wadjemup / Rottnest Island use hazardous materials and other potentially polluting substances that could result in environmental contamination and pose hazards to health and safety if not properly managed. These include hydrocarbons, solvents, herbicides, pesticides and other chemicals.

The Rottnest Island Authority (RIA) has developed this **Spill Prevention and Response Plan (SPRP)** to provide guidance to staff and other island operators regarding the minimum requirements for chemical and spill management. It has been developed using the **prevention**, **preparedness**, **response and recovery (PPRR)** model as recommended by the Department of Water and Environmental Regulation (DWER, 2020¹).

The RIA are responsible for the prevention, preparedness, response and recovery of their own chemicals and, where appropriate, to provide guidance and assistance to other Island users. The RIA are also best positioned to undertake "First-Strike" response in the event of a marine spill, such as a leaking boat fuel tank and have tow-trailers equipped with containment equipment for this purpose. See the section titled *Marine Spills*, for more detail.

All island operators, including maintenance, tourism, transport and hospitality organisations are responsible for their own spill prevention, prevention, response and recovery. This includes developing procedures and providing staff with appropriate training.

Where construction or other transient works are being undertaken on the Island, contractors are responsible for all chemical management and spill response for the duration of the works. Management and emergency response procedures must be outlined within safe work method statements or an EMP/CEMP as appropriate to the scale of the scope of works. RIA project managers are responsible for ensuring contractors have sufficient procedures in place when engaging them.

### Prevention

Prevention is the first line of defense. The following are examples of prevention principles that should be observed throughout all Island operations:

- Regularly maintain and inspect plant/vehicles, chemical storage areas, containers and bunds to detect and prevent leaks.
- Refuel or transfer hazardous liquids over a sealed or bunded area.
- Store chemicals away from direct sunlight, unsealed ground, waterways and storm drains.
- Store all hazardous materials on secondary containment appropriate to the volume and location. The following principles are suggested:
  - Use drip trays for small volumes (<5L);</li>
  - o Store multiple containers in a purpose made cabinet (for example a self-bunded flammables cabinet);
  - Each chemical storage area (including cabinets) should have the capacity to capture and contain the volume of the largest container plus 25% of the total capacity;
  - Larger containers such as drums, IBCs and tanks must be bunded or be self-bunded to capture 110% of the capacity; and
  - The use of uncovered bunds in external areas is discouraged as sun can degrade the material and rain ingress can reduce the functional capacity of the bund, leading to overflow. Where these are used, procedures should be in place to regularly inspect and they must have sufficient capacity to allow for a heavy rain event.
- In the case of Dangerous Goods, store in accordance with applicable regulations, while observing minimum separation requirements.
- Use spill prevention equipment when transferring from one container to another, such as funnels.
- Restrain chemical receptacles during transport to prevent tipping.

<sup>&</sup>lt;sup>1</sup> Department of Water and Environmental Regulation (DWER). <u>Contaminant spills — emergency response plan.</u> DWER, 2020.



# **Preparedness**

It is important that all Island staff and other operators are prepared to respond to incidents involving hazardous and other potentially polluting substances. Area manager responsibilities include;

- Ensure current (<5 years) Safety Data Sheets (SDSs) are readily available for all hazardous materials stored or transported as part of their operation.
- Maintain a Hazardous Substance Register. See <u>SafeWork Australia</u> for guidance.
- Clearly label all chemical storage containers, including waste chemicals.
- Keep and maintain (i.e. restock, audit) clearly marked spill kits on site that are appropriate to the volume and type of substances stored. Common inclusions in a spill kit include:
  - Non-sparking (plastic/grain) shovel;
  - o Drain covers;
  - Absorbent booms, pads/sheets;
  - o Absorbent granules such as diatomaceous earth (kitty litter) and cellulose;
  - Broom for spreading absorbent granules;
  - PPE; and
  - Waste bags with ties for disposal of contaminated absorbents and PPE.
- Make available appropriate personal protective equipment (as per the SDS), such as gloves and face masks.
- Have in place emergency response plans, including site maps to identify the locations of chemical storage, first aid kits and spill kits.
- Ensure staff are aware of their responsibilities and are trained (to a level proportionate with work duties) to handle and store chemicals and respond appropriately to spills/leaks.

# Response

All spills/leaks are different and should take in to account the nature of the material, volume and location. Responding to spills and leaks should follow the "CCCC" principals – **Control, Contain, Contact, Clean up**.

In all spill responses, it is critical that hazards to humans and infrastructure are assessed before entering the spill area. For example, it may be necessary to isolate nearby ignition sources in the case of a fuel spill. SDSs should always be referred to for spill response information (*Accidental release measures* will be outlined in Section 6 of an SDS).

Personnel must not expose themselves to any hazardous situation when responding to a spill, such as:

- Attempting to lift heavy objects unassisted;
- Exposing themselves to ignitable, reactive, toxic or corrosive material without appropriate protective equipment; or
- Entering a confined space without suitable breathing apparatus.

### 1. CONTROL

It is critical that the source of the spill/leak is identified and controlled or stopped as soon as possible to limit the level of response required, to prevent environmental harm and to preserve human safety. For example, this could be as simple as righting a turned over jerry can. Actions to consider include:

- Activate emergency stop buttons;
- Turn off valves/taps/pumps to arrest spills from leaking pipes and fittings;
- Large containers (for example an IBC) that cannot be plugged can be moved from an unsealed area to a nearby sealed or bunded area;
- Perforated drums can be rolled so that the hole is facing upwards;
- Otherwise avoid moving containers as this can spread the spill;
- Turn off ignition sources;
- Move people away from the area and upwind of the spill;
- Cordon off the area using cones, tape or temporary fencing; or
- Deploy traffic management.



### 2. CONTAIN

Containment stops the spill/leak from spreading. In activating the containment step, the focus should be on protecting unsealed ground, waterways and stormwater drains as priority. Actions to consider include;

- Form "dams" of absorbent materials around the boundaries of the spill, starting (where safe to do so) at the edge that is running down gradient.
- Place absorbent materials around drains and along unsealed areas to contain the spill to sealed ground. Impervious (e.g. polyurethane), weighted drain covers can also be used to cover grates.
- Cap stormwater outfall pipes.
- In the case of a marine oil or fuel spills, placing absorbent marine booms around the slick offers the best results.

### 3. CONTACT

The scale of the response can vary dramatically and may require the assistance of other services.

- For incidents requiring large scale emergency response or where there is risk to life call 000 immediately (24 hours).
- Where first responders are unable to control or contain the spill, RIA Rangers may be able to provide additional support via Ph: 9372 9788.
- The Poisons information centre can provide information on toxicology and first aid at 13 11 26 (24 hours).
- See Marine Spills for contact protocols where spills occur in aquatic areas.

Responders should also consider whether nearby residents and businesses should be notified of the spill.

### 4. CLEAN UP

### a. Terrestrial Spills

Cleaning up of the spill should only be undertaken if safe to do so and where suitable material and personal protective equipment are available.

Small spills can often be cleaned up using absorbent pads.

Spills that cover a larger area are best addressed using absorbent granules as these can be applied thinly using a "scatter" action and then spreading with a broom, while remaining very effective in drawing up liquid. Refer to the SDS and spill equipment manufacturer directions when selecting a product as each comes with its own benefits and drawbacks.

In the case of large spills, it may be necessary to engage specialised contractors/consultants to, for example;

- Excavate impacted soil using heavy machinery.
- "Scrub and suck" heavy oil stains using detergent and wet-vac / suction truck.
- Validate the site to ensure no residual contamination or provide guidance on next steps (e.g. contaminated site advice).

All saturated absorbent spill materials and PPE should be placed into an impervious bag to prevent leaching and appropriately disposed of. Sometimes spills will generate Controlled Waste, which must be disposed of in accordance with the *Environmental Protection (Controlled Waste) Regulations 2004*.

## b. Marine Spills

The Department of Transport (DoT) is the Hazard Management Agency (HMA) for maritime environmental emergencies in WA. This includes marine oil pollution and marine transport emergencies.

The RIA's role extends only to "First Strike Action" to minimise the impact of any spill on the environment by containment with booms. It is important to prevent spills (particularly heavy oils) coming into contact with the shoreline, rocks or other terrestrial interface areas due to the complexity in recovery. The priority is to contain the substance in



the marine environment and await recovery resources. RIA do not have any capacity to recover spilled product and their role ceases after the **Control**, **Contain and Contact** stages. In the event of a marine spill, the following protocol is to be enacted:

- 1. Rangers are notified of current or impending spill via Rottnest Ranger On-Call line 9372 9788.
- Ranger vessels attends the scene to assess the scope of the spill and notifies DoT as the HMA on 08 9480 9924, then follow specialist advice from the Maritime Environmental Emergency Response team (MEER) using following reporting process:
  - a) Provide:
  - Name, contact details, vessel name;
  - where and when the incident occurred;
  - a description of the incident (including incident type, any pollution details, weather and environmental details); and
  - a summary of any actions taken, underway or planned as a result of the incident.
  - b) If requested by DoT, RIA will submit an incident report. For marine oil pollution incidents, FESC/ Rangers would send a completed pollution report (POLREP) by email to <a href="maine.pollution@transport.wa.gov.au">marine.pollution@transport.wa.gov.au</a> within:
  - 24 hours for LEVEL 1 incidents; or
  - 2 hours for actual/potential LEVEL 2/3 incident.

**NB:** Where a marine oil pollution incident occurs within WA State Waters (including ports), the master or person-in-command of the vessel or facility that causes or identifies the incident **must** report it immediately.

- 3. Rangers, with assistance of the Fire and Emergency Services Co-ordinator (FESC) and Rottnest Island Private Fire and Rescue Service, transport absorbent booms from storage to ranger vessels or designated response area.
- 4. If spill is more significant (higher volume, marine oil spill etc.) Ranger's may deploy containment booms to attempt to contain spill.
- 5. Washdown/ Decontamination of equipment will be undertaken by DoT and either disposed of or returned to the RIA.
- 6. If wildlife is impacted by a marine spill DBCA are the HMA for <u>Oiled Wildlife Response</u>. If any wildlife is impacted the State Duty Officer needs to be contacted on 9219 9108.

# Recovery

Once the spill response has concluded, it is important that the event is reported using a Hazard Incident and Near Miss Report (HIN). This may result in an assessment or investigation to determine root cause and any resulting actions to prevent recurrence.

It is important that spill kits. PPE and first aid kits are all restocked as soon as possible following a response.

Discharges of waste likely to cause pollution or environmental harm must be reported to the Pollution Watch Hotline on 1300 784 782 as soon as practical (as per requirements under section 72 of the *Environmental Protection Act 1986*). Refer to the department's fact sheet: Notification of waste discharges for further information on reporting requirements.

Discharges of effluent waste that could come in to contact with the public or any potential contamination to public drinking water source areas much be reported to the Department of Health on; (08) 9222 4222; or 1800 434 122 (afterhours); or emergency.oncall@health.wa.gov.au.