1. When should I use this sheet?
This applies to all sites where environmentally hazardous substances such as fuels, oil and drilling fluid, are used, regardless of site size or duration of works.

2. What’s the aim?
**Stormwater systems must only drain rain**
To be prepared for the occurrence of spills or emergency situations – making sure that personnel know how to respond to, prevent or reduce pollutants or contaminants entering the receiving environment (stormwater drains, streams or the sea).

3. What’s the problem?
Spills or emergency situations can happen anywhere at any time. On construction sites many different environmentally hazardous substances are used and stored that pose an environmental risk.
One of the most common environmentally hazardous substances are hydrocarbons, which are found in petrol, diesel and oil. Most hydrocarbon spills on construction sites occur during refuelling of equipment, burst hydraulic hoses and through poor storage of fuel containers. Hydrocarbons can burn and poison aquatic plants and animals and can form a film on the surface of water, which stops oxygen getting from the air into the water making it difficult for aquatic animals to breathe and plants to grow. Fuels and oils also contain contaminants which can cause long term health effects in people and animals (e.g. cancers).
Other common environmentally hazardous substances, such as drilling waste and slurry, contain polymer extenders, copper drill lubricants and sediment, all of which are toxic to aquatic animals and plants.

4. Site management and environmental controls
**Forward planning – before you start works**
- Complete the Environmental Task Analysis Form to identify potential environmental risks and define how environmental risks can be mitigated or reduced through site practices or environmental controls. Remember your activities will need to be in accordance with the legal requirements defined in the Compliance Management Plan.
- Check where stormwater drains are and decide where any spills would likely go.
- Should refuelling need to occur on site, identify and communicate a designated refuelling area away from stormwater drains and surface water.
- Minimise the amount of hazardous substances held on site and ensure they have secondary containment as a backup.
- On larger sites and for large machinery which take a lot of petrol or diesel, refuel at the depot or use a designated refuelling area that is bunded and lined with impermeable material (e.g. plastic sheeting). Use drip-trays where appropriate.
- Make sure all storage containers are clearly labelled, fit for their purpose, free of leaks and stored in a safe, secure area where if a spill were to happen, it would not reach stormwater drains, streams or the sea.
- Have a site specific spill response plan with equipment handy – keep a fully stocked spill kit on site.
- Make sure all staff are well trained in spill response and emergency management procedures.
- Make sure the person responsible (identified in Task Analysis) for ensuring environmental practices and controls has followed/implemented these prior to starting works.
Environmental practices and controls – during construction

- Reduce your risk by blocking off nearby stormwater drains with drain plugs, sandbags or bunding when using environmentally hazardous substances.

If a spill or emergency situation was to occur:
(Source: Auckland Regional Council Pollution Factsheets)

Be safe
- What has been spilt? How much?
- Do you need safety gear?

Stop the source (if safe to do so)
- Turn off, plug the leak or right the container.

Protect stormwater
- Confine the spill with sandbags, booms or other suitable material.
- Block off stormwater grates.

Notify
- Inform site foreman, council’s Project Manager/Representative, other agencies and if required Auckland Council’s Pollution Hotline on 09 377 3107.

Clean up
- Neutralise hazardous substances.
- Pump or sweep into safe container.
- Clean up residuals without allowing wash or sweepings into stormwater.
- Ask for advice if required.

Dispose responsibly
- Use a responsible water disposal contractor to remove contaminated material.

Restock and review
- Restock spill kit and review to prevent recurrence.
- Ensure at regular intervals that staff are trained in spill response and reminded of the site specific spill response plan.
- Review incident.

Monitoring and maintenance
- The site foreman shall ensure that regular inspections are conducted to identify and rectify any potential environmental hazards.

5. Tips for refueling
- Refuel in designated refuelling areas using drip trays or an absorbent mat to catch any spilled fuel.
- No machinery or vehicles to be left unattended while refuelling.
- Ensure that storage areas have bunding areas which are sized based on 110 per cent of the largest container stored inside the bunded area.
- Store the least amount of fuel on site as possible and store it in a secure location.

6. Useful links and information
- Go to aucklandcouncil.govt.nz and search for ‘pollution’, here you will find a range of helpful information and links to the range of pollution related resources and educational materials.
- Refer to the following Stormwater Unit BMPs:
  - Dewatering
  - Trenching
  - Potentially contaminated sites
  - Catchpit protection
  - Works within watercourses
  - Concrete and asphalt
  - Directional drilling.

If a discharge occurs that has the potential to, or has entered the stormwater system or natural receiving environments, contact the Auckland Council 24 HOUR POLLUTION HOTLINE on 09 377 3107 immediately.

Find out more:
For access to this BMP and to find the other BMP information sheets, visit aucklandcouncil.govt.nz/stormwater

Important Notice: ©Auckland Council 2011. This Best Management Practice (BMP) sheet is an information guide only and is not technical or compliance advice. Its recommendations may not be complete or appropriate for all situations, and the person doing/arranging the work remains solely responsible for making their own assessments and doing the work properly, safely and in compliance with all laws and regulations.