

Tab 4

Environmental Emergency Response Measures

Environmental Emergency Procedure for Oil/Fuel Spillage

Work Sections/Locations

All parts of the construction works area boundary

Responsibility of	Role/Duty
Construction Manager	<ul style="list-style-type: none"> Ensuring that all personnel are trained in emergency procedure for oil/fuel spillage Ensuring that all construction site plant, machinery and vehicles are equipped with spill kits Alerting the Environmental Clerk of Works of the oil/fuel spillage.

Incidents involving oil spillage

This procedure covers the accidental loss of oils that may arise from plant failures, fuelling, etc.,

- Ensure appropriately trained staff and necessary containment equipment is on site to allow immediate control of any spills.
- Contractors will be required to check all fuel and hydraulic lines, service, and document all machinery prior to the commencement of construction
- Spill-kits and hydrocarbon absorbent packs will be stored in the cabin of each vehicle and operators will be fully trained in the use of this equipment
- Spill response apparatus and infrastructure should be inspected on a regular basis to ensure that the kits are fully stocked and materials are of adequate condition, and where this is not the case kits should be replenished or replaced.
- Spill kits shall be fitted with break seals and site operatives shall be required to notify the construction manager if these seals are broken.
- Spill kits should be maintained at all fuelling and oil storage locations. All mobile fuelling and oil bow-sers/tankers shall have full spill kits, appropriate to their capacity.
- All machines that utilise hydraulic systems, such as excavators, dumpers, and cranes, shall have appropriately sized spill kits on board at all times.
- It is the construction manager's responsibility to ensure spill kits/material is available as specified.

All hydrocarbons will be managed appropriately to prevent their potential release to surface or ground water.

- All hydrocarbon containers will be stored in bunds. For above ground tanks, double skinned tanks will be used and all will be externally bunded. All transfer of hydrocarbons will be undertaken in a bunded area.
- On arrival at spill site, assess the situation. If a volatile, flammable material is spilled, immediately warn everyone in the vicinity, control sources of ignition and ventilate the area.
- If possible without risk of personal injury, stop and contain the spillage using the appropriate spill kit (as per material type).
- Have all shores and surface water drains in area of spillage covered or protected as quickly as possible to prevent pollution.
- Report all spills immediately to the Environmental Clerk of Works and Construction Manager who will mobilize specially trained site personnel to clean up and dispose of residues and clean-up materials in an appropriate manner.

- Spill kit waste materials will be collected from the compound by a specialised hydrocarbon and hazardous waste service provider with a valid waste collection permit for reprocessing at a EPA waste licensed facility.

Environmental Emergency Procedure for significant pollution occurrence in local surface waters

Work Sections/Locations

All parts of the construction works area boundary

Responsibility of	Role/Duty
Construction Manager	<ul style="list-style-type: none"> Will inform the Environmental Clerk of Works of any observed issues.
Environmental Clerk of Works	<ul style="list-style-type: none"> Will notify appropriate personnel in Kilkenny County Council, the EPA and Inland Fisheries Ireland

Incidents involving oil spillage

In the unlikely event of a significant pollution occurrence in local surface waters relating to the works then the following protocol will be adopted:

- Water quality monitoring will be undertaken visually, and the Construction Manager will have informed the Environmental Clerk of Works of any observed issues
- If the source is from the works then the Environmental Manager will notify appropriate personnel in Kilkenny County Council, the EPA and Inland Fisheries Ireland
- Work will not continue again until the source of the pollution is identified and eliminated

Contact Details

List of Contacts to be added, from this EMP Main document.

Environmental Emergency Procedure for Frac-Out during Drilling Works	
Work Sections/Locations	
Horizontal Directional Drilling location - Watercrossing W3	
Responsibility of	Role/Duty
Construction Manager	<ul style="list-style-type: none"> Supervising water course bed and drilling works, including drilling pressures, implementation of contingency measures
Mud Engineer	<ul style="list-style-type: none"> Supervising water course bed and drilling works, including drilling pressures, implementation of contingency measures
Purpose of Frac-Out Contingency Measures	
<ul style="list-style-type: none"> Minimize the potential for a frac out associated with horizontal directional drilling activities Provide for the timely detection of frac outs; Protect the watercourse Ensure an organised, timely, and “minimum impact” response in the event of a frac out and the release of drilling mud. 	
Contingency Measures	
<ul style="list-style-type: none"> In the event of break-out occurring in the river bed, the rig will immediately shut off the pumps and the drilling assembly will be pulled off to reduce annular pressures. In the event of break-out on the road an excavator will be available to dig a pit to contain fluid with vacuum trucks/pumps available to transfer drill fluid from the containment point back to the recycling point. Drilling fluid additives designed to plug the formation will be introduced to the circulation system and let set. 	