SECTION A: NON-TECHNICAL SUMMARY

1.0 Waste Water Works & Activities Carried Out Therein

The waste water works (WWW) comprises all public sewerage upstream of and including the Waste Water Treatment Plant (WWTP) at Carrigrennan, Little Island, Co. Cork. The WWTP treats waste water to a secondary standard and treated effluent discharges to Lough Mahon through a submarine diffuser outfall.

The WWW also comprises of the following:

- 32 no. public pumping stations, all of which are equipped with emergency overflows;
- 71 no. combined sewer overflows (CSOs);
- 1 no. known combined outfall;
- Approximately 400 km of sewer.

The activities carried out therein are confined to the collection, conveyance and treatment of public sewage.

2.0 Sources of Emissions from the WWW

The sources of emissions from the WWW are as follows:

- 1 no. primary discharge from the WWTP;
- 32 no. emergency overflows from public pumping stations;
- 71 no. CSOs;
- 1 no. known combined outfall.

3.0 Nature & Quantities of Foreseeable Emissions from WWW into Receiving Aqueous Environment

The WWTP emits an average of 94,000 m³/day of treated waste water into Lough Mahon. The treated waste water is in accordance with the Urban Waste Water Treatment Directive (91/271/EEC).

The 32 no. emergency overflows from public pumping stations, the 71 no. CSOs and the 1 no. known combined outfall emit a variable quantity of untreated waste water into the following receiving water bodies:

- Curraheen River:
- River Lee;
- Trabeg River;
- Lough Mahon;
- Douglas Estuary;
- Glasheen River;
- Kiln River.

4.0 Identification of Significant Effects of the Emissions on the Environment

The significant effect of the emissions is the pollution of the receiving water body with untreated and treated waste water. This effect is exacerbated in smaller receiving water bodies, such as the Curraheen, the Trabeg, the Glasheen and the Kiln, where due to lower flow volumes the dilution impact is impaired.

5.0 Proposed Technology for Preventing/Reducing Emissions from WWW

It is proposed to install a telemetry system in the WWW in order to more effectively monitor the spill frequency of the emergency overflows and the CSOs and to adopt a more focused approach to maintenance.

It is proposed to connect the known combined outfall to the public sewerage system.

6.0 Further Measures Planned to ensure that No Significant Pollution is Caused

It is proposed that a review of the design and operation of the CSOs will be conducted.

7.0 Measures Planned to Monitor Emissions into the Environment

The water quality in the vicinity of the primary discharge point is currently being monitored for specific water quality parameters as part of the operation of the WWTP.

The upper reaches of the River Lee within the City Borough Boundary are currently being monitored for specific water quality parameters.

Emergency overflows and CSOs are not currently being monitored but measures are planned. However, these measures are at a preliminary stage.

A copy of the Cork Main Drainage Preliminary Report will be submitted in support of the Non-Technical Summary.