WITNESS STATEMENT

1 Introduction

My name is Ria Lyden. I am an Associate Director of Arup Consulting Engineers.

I have a Bachelor of Engineering Degree in Civil Engineering and a Master of Business Administration Degree. Both degrees are from University College Cork. I am a Chartered Engineer. I am a fellow of the Institution of Engineers of Ireland and a member of the Institution of Structural Engineers. I have worked as a civil and environmental engineer for 25 years.

My evidence will respond to the objections which relate to the water drainage systems on site.

2 Surface Water Drainage Systems

2.1 Roofs of Buildings

There are no potential sources of spills or contamination on the roofs of the buildings. Rainwater from the roof of the main building will be collected and drained directly to the surface water storage tank in the basement.

2.2 Roads, Car Parks and Hard Standings (other than the service yard and truck parking area)

Rainwater from roads, car parks and hard standings, other than the service yard and truck parking area, will drain via oil interceptors to the surface water tank. Rainwater from the roof of the buildings, other than the main building, will drain to this system too. This is due to the configuration of the system, not because the rainwater from these roofs could be contaminated.

2.3 Surface water tank

The contents of the surface water tank will be used in the process. It has been calculated that this tank will have sufficient storage for a 5 year return period storm. In a very wet period, it will be possible to diverted rainfall to the ground water storage tank if the main surface water tank is full and if the ground water tank has capacity. The combined capacities of the two tanks will accommodate run-off from a 20 year return period storm. In a more severe storm, it is proposed that there would be an overflow from these tanks to the existing drainage ditch close to the north-western corner of the site.

2.4 Service Yard and Truck Parking Area

The rainfall from the service yard area, where raw materials and residues will be unloaded or loaded, will be collected in a separate yard drainage system and will be stored in the recovery water tank, from where it will be pumped for use in the process. Rainwater from the truck parking area will drain via an oil interceptor to the yard drainage system. The water collected in the yard drainage system will be retained in the plant under all circumstances.

2.5 Bunds

Bunds will not be connected to the surface drainage system. Rainwater collected in external bunds will be pumped out for collection and appropriate disposal.

Surface Water Drainage Systems

	Rainwater Source	Potential contamination sources	Primary Use	Overflow	Environmental Protection
Incineration Building	Roof of main building	None	As process water collected in the surface water tank	If capacity is available overflow from surface water tank to groundwater tank. If groundwater tank full or in very wet conditions particularly if plant is shut down, overflow to drainage ditch	None required
	Roads, car parks and hard standings	Possible oil leak from car or truck	As process water	If capacity is available overflow from surface water tank to groundwater tank. If groundwater tank full or in very wet conditions particularly if plant is shut down, overflow to drainage ditch	Water to pass through oil interceptor prior to entering surface water tank
Other Areas	Roofs of warehouse, administration building and pump house*	None	As process water	If capacity is available overflow from surface water tank to groundwater tank. If groundwater tank full or in very wet conditions particularly if plant is shut down, overflow to drainage ditch	Water to pass through oil interceptor prior to entering surface water tank

*The rainwater from the roofs of these three buildings will be passed through an oil inceptor due to the configuration of the drainage system, not because of a perceived risk.