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Client **Takeda Ireland Limited**

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Revision Changes

The following is a summary of the main changes that have occurred in this document from the last revision and should be used as a guide only.

(Use this section to highlight main changes from previous revision)

REVISION CHANGES	
Section	Remark

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1. INTRODUCTION

1.1 General

Takeda Ireland intends to construct a Volatile Organic Compound (VOC) abatement system using thermal oxidization technology from the manufacturing process and utilities workshop at their existing Grange Castle facility. This report will highlight the main infrastructure elements of the project. This report is to be read in conjunction with an environmental impact assessment completed by AWN consultants, planning report and architectural drawings submitted as part of the planning permission.

1.2 Contact Information

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2. CONNECTIONS TO INFRASTRUCTURE

2.1 Incoming water Mains

The site is currently served with mains water supply via an existing connection to the Irish water network. Water is provided to onsite storage vessels to balance demand. Water demand for the project will be provided from onsite water storage within the limits of the existing connection agreement.

2.2 Foul Drainage

No new connections to the public foul sewers are proposed. Provision for a new sink within the workshop will be pumped into the existing onsite network.

During construction allowance has been made for contractors' compound with a proposed occupancy of 30 people, a local sump is to be constructed to allow for pumping into the existing foul system.

2.3 Process drainage

Waste produced from the facility will be treated as process waste which will be connected to the existing onsite process drainage and treatment system via the overhead Piperack (refer to EIAR for details on operation of process drainage system) prior to discharge. Flows are controlled on site within the existing process waste tank storage area which are treated prior to discharge. No increase in the discharge license is required and the site will comply with existing IEL requirements as outlined below:

B.3 Emissions to Sewer

Emission Point Reference No:	EP-WW-01	
Name of Receiving Sewer:	Irish Water Sewer	
Discharge Location:	Grid Reference: 303301E, 232136N	
Monitoring location:	MP-WW-01	
	Grid Reference: 303286E, 232023N	
Volume to be emitted:	Maximum in any one day:	304 m ³
	Maximum rate per hour:	50 m ³

2.4 Surface water Drainage

A SUDS strategy has been applied to minimise any increase in surface water discharge into the existing system, this means there is minimal impact on the downstream attenuation system which currently operates on the site with no impact on the discharge capacities.

The existing site is currently attenuated prior to discharge. No new increase in surface water outflows are required, new access roads are to be constructed of permeable asphalt with an underlying stone build-up on top of a geotextile filter membrane. Bunded areas with the VOC

abatement compound will be treated as process waste and will be discharged to the onsite treatment system as per site operating procedures and EPA license requirements. The roof of the workshop is to discharge to a local soakaway designed in accordance with BRE 354 soakaway design and in accordance with the requirements of the local authority.

The paved area within the compound (excluding the bunded areas) with an area of 276m² will drain into Aco channel drains which are connected to the onsite internal surface water system. It was decided to connect this area to the existing site surface water system so that containment can be provided to discharge. The increase in area represents less than 0.1% of the total paved area on the site and will have minimal impact on the downstream attenuation systems.

All other landscaping finishes are to be permeable and thus no additional discharge into the existing attenuated system is required. Refer to architectural drawings for landscape treatment and permeable areas.

2.5 Site services

Utility provision to the VOC abatement system is to be provided from existing site services via the proposed new Piperack extension.

3. CONTRACTORS COMPOUND

3.1 General

A temporary contractor's compound is required to facilitate works during construction activities. It is estimated that parking and facilities for a maximum of 30 people will be required.

3.2 Foul water

Toilet facilities will be required within the compound. A sump is to be constructed within the footprint of the contractor's compound and pumped to local foul water system within the Takeda site.

3.3 Surface water

It is proposed to construct the compound by removing the existing grassed topsoil and replacing with compacted hardcore. A geo liner membrane is to be installed below the hardcore onto a prepared surface to capture any contaminants and separate from the existing underlying strata.

4. TRAFFIC

4.1 General Overview

The main entrance to the site is security controlled and monitored at the northern end of the site. Access is provided via the New Nangor Road the Grange Castle Business Park internal road network and is located within 2km of the M7 motorway. Operation of the TO will require 2-3 operatives involved in maintenance and operation activities at the facility. Delivery of materials such as

expendables will occur on an infrequent basis and as required. It is not envisaged that the facility will have any significant increase in traffic flows to the site.

Construction of the facility will require delivery of large equipment sections; all sections are to be delivered on road safe sizes as per NRA guidance. A construction management plan will be developed with the appointed contractor to allow for safe deliveries of large equipment. Construction activities are expected to have a staff requirement to a maximum of 30 people during peak construction activities.

5. CONCLUSION

The Grange Castle facility is an EPA licensed facility with a relevant emission license, the EIAR submitted as part of this planning will address in more detail relevant parts of the environmental aspects of the project. The new VOC abatement system is adequately served via existing onsite infrastructure with no additional discharge capacity to the foul or surface water network is required. Water supply and process water discharge are to be operated within agreed limits with Irish water. Traffic impact from the new facility is minimal and will not have any significant impact of traffic flows to and from the site.

6. APPENDIX 3 – LIST OF APPLICABLE DRAWINGS

6.1 DPS Drawings

Drawing Number	Title	Revision
A21DB035-CV-100	PROPOSED DRAINAGE LAYOUT	B
A21DB035-CV-500	PROPOSED CIVIL DETAILS	B