SANITARY EFFLUENT COMPLIANCE

Site staff at the proposed waste recovery facility will use toilet, hand washing and welfare facilities to be established prior to commencement of waste intake activity.

Potable water will be supplied to these facilities from an existing water main which services the application site and is understood to be part of the Gormanstown Usk Group Water Scheme (GWS) operated by Kildare County Council.

It is envisaged that a new proprietary wastewater treatment system (approved under Planning Ref. 19/949) will be installed and remain in service for the duration of the proposed backfilling activities. Wastewater from sinks and toilets will initially be discharged to a wastewater treatment system (or similar) and treated effluent will be discharged thereafter to ground via a sand polishing filter. Details of percolation testing and the site suitability assessment are provided below. Supporting documentation is also provided.

Percolation Testing

Waste Water Maintenance Ltd. was appointed in late 2019 to undertake percolation ('T') testing at the application site and to advise (in light of the test results obtained) on the selection and installation of an appropriate wastewater treatment system which complies with the current EPA Code of Practice "*Wastewater Treatment and Disposal Systems Serving Single Houses (p.e.* \leq 10).

Percolation testing was undertaken on site in December 2019, at the site infrastructure area at the northern end of the application site. The test results and the conclusions and recommendations arising therefrom are presented in the completed *Site Characterisation Form for an On-Site Wastewater Treatment System* (attached). The percolation test locations are indicated in Figure A which accompanies the form

In view of the fast soakage observed by the percolation tests, it was recommended that a small scale wastewater treatment plant in conjunction with a sand polishing filter overlying a soil polishing filter be installed at the site to manage wastewater arising from toilets, wash hand basins and sinks at the proposed site offices and staff welfare facilities.

In light of this recommendation, **P** is proposed to install

- (i) Tricel Novo Package Plant which provides on-site secondary wastewater treatment using submerged aeration filter technology and
- (ii) Sandcel sand polishing filter to provide tertiary treatment by distributing treated effluent over stratified sand layers prior to its discharge to ground.

Full details of the proposed wastewater treatment system, the design of which is based on a population equivalent (P/E) of 6 and which satisfies the requirements of the EPA Code of Practice, are presented in a Site Suitability Report, also attached, together with an updated site layout plan (Ref. RFI 9) showing the intended location of the proposed treatment plant and polishing filter.

