

Attachment D.1: Infrastructure

D.1.1 General Description

Please refer to Chapters 1 and Chapter 5 of the accompanying EIS for a general description of the proposed development. In summary the following primary infrastructural changes are proposed;

Two currently temporary structures are to be converted to permanent status; They are (i) a 375m² spare parts warehouse to include an associated electrical switchgear building & hardcore surround and (ii) a single story 396m² modular office block with associated infrastructure of a new effluent treatment plant and percolation area, electrical switchgear building, paved roadway leading to office building and hardcore surround. 22 additional car parking spaces will be added to the existing car park and the former temporary Contractor's construction parking area will also be converted to permanent status. Future additional storage capacity, (pending anticipated requirements) is also proposed for ammonia storage and fuel oil storage tanks.

The general layout of the facility is shown in the drawings of Appendix B3-B5. An aerial photograph of the site (dated March 2012) is presented below in Figure D.1.a.



Figure D.1.a: Site Layout

D.1.a Site security arrangements

Security measures provided at the site are detailed in Chapter 5 of the accompanying EIS. No changes to security arrangements are proposed in this application.

D.1.b-c Site roads and hardstanding areas

The layout of the existing roads and paved areas are shown in the drawings accompanying this application. As part of this application it is proposed to install a new paved road to serve the proposed permanent modular office building and convert to permanent status number of additional hardstanding areas to accommodate additional working areas required by contractors for annual shutdown and maintenance. A description of these areas is provided in Chapter 5 of the accompanying EIS.

Overall, approximately 6.8Ha of the site will consist of roofs, hardstands, roads and grassed areas which drain into the stormwater drainage system. Details of this system are provided in Attachment D.1.k and Section 11 of the accompanying EIS.

D.1.d Plant (weighbridge)

Two weighbridges are provided at the facility for vehicles entering and leaving the site, as shown in Appendix B3-B5. These have a capacity of 50 tonnes each and are approximately 3.3m x 15.7m in size.

Detail on waste acceptance procedures is provided in Chapter 5 of the accompanying EIS.

D.1.e Wheel Wash

As all roads are hard-surfaced, there is no permanent wheel wash at the facility.

D.1.f Laboratory facilities

There is no requirement for laboratory facilities on site. Should any requirement for laboratory analysis arise for the proposed new waste streams (e.g. liquid waste), then Indavers Laboratory in the Dublin Port facility or other accredited laboratory will be used. Permanent monitoring equipment for the continuous measurement of stack emissions is in place. Non-continuous monitoring and other analysis is carried out by independent and accredited laboratories. Details on air emissions monitoring arrangements are included in Attachment F.2.1.

D.1.g Fuel storage

At present 44m³ of Fuel Oil storage is provided at the facility. As detailed in Section 5.4.6 of the EIS, it is anticipated based on the experiences gained to date during the commissioning process that at some future date, additional storage capacity would be beneficial to operational efficiency. It is proposed to apply for a duplicate 44m³ tank for this purpose. The tank will be located next to the existing tank as shown on the drawings accompanying this application (EIS Chapter 5 Figure 5.4).

D.1.h-i Waste Quarantine and Inspection

Waste acceptance and handling procedures are outlined in Chapter 5 of the accompanying EIS. The proposed additional wastes quantities and types will require limited changes to the existing waste acceptance and handling procedures.

D.1.j Traffic control

No changes are proposed to the existing traffic control system at the site. A speed limit of 20 kmph remains in place to control traffic onsite. This limit is signposted at the entrance of the facility. The inbound weighbridge and bypass lane has been designed at a sufficient distance from the site entrance so as to ensure any queuing onsite does not disrupt traffic on the Regional Road R152.

At the weighbridges and bypass lane, traffic control is provided by barriers. Both inbound and outbound traffic can pass through a bypass lane if they do not require weighing. This helps maintain the flow of traffic onsite and avoid queuing.

At present the primary staff and visitors carpark is located next to the security building near the entrance to the facility. The existing staff carpark provides 44 spaces for vehicles with an additional 2 designated disabled parking spaces. It is proposed to provide an additional 22 car parking spaces. There is also a parking area for a bus next to the security building. Access to the site from public areas will be controlled by the security station.

A temporary car park originally used as an overflow parking area by contractors during construction works is to be converted for use as a general laydown/parking area for annual maintenance and shutdown periods. Please refer to the attached Drawings of Appendix B3-B5 and Figure D.1.a.

D.1.k Sewerage and Surface Water Drainage

D.1.k.a Sewerage infrastructure

There are no process effluent emissions to sewer. Domestic sewage from toilets, changing and kitchen areas discharges via the foul drainage system into on site effluent treatment systems. A new effluent treatment system is proposed for the permanent modular office structure. Its location is shown on the drawings accompanying the application (Drawing Ref 21098\WL\005\RevA).

Effluent entering the system passes into a collection chamber (similar to a septic tank) which retains any solids, before being pumped through a rising main to a series of Puraflo modules. In these modules, the effluent is evenly distributed over the surface of a biofibrous media. As the effluent percolates through the media, it is treated by a combination of physical, chemical and biological interactions between the pollutants and the media. The treated effluent emerges from the base of the unit and is distributed over a percolation area, which will be constructed in accordance with the guidelines in the EPA's Wastewater Treatment Manual and requirements of the recently published Guidance on the Authorisation of Discharges to Ground.

The location of the treatment system and percolation area is shown in the drawings of Appendix B3-B5.

D.1.k.b Surface water drainage infrastructure

The waste-to-energy plant has been designed to ensure there will be no process effluent. Therefore, the drainage infrastructure is only required to handle surface water runoff and any spills or firewater that may occur.

A description of the proposed surface water management system is provided in Chapter 11 of the accompanying EIS.

D.1.1 All Other Services**D.1.1.a Power**

No changes are proposed to the power infrastructure in place and permitted under W0167-2.

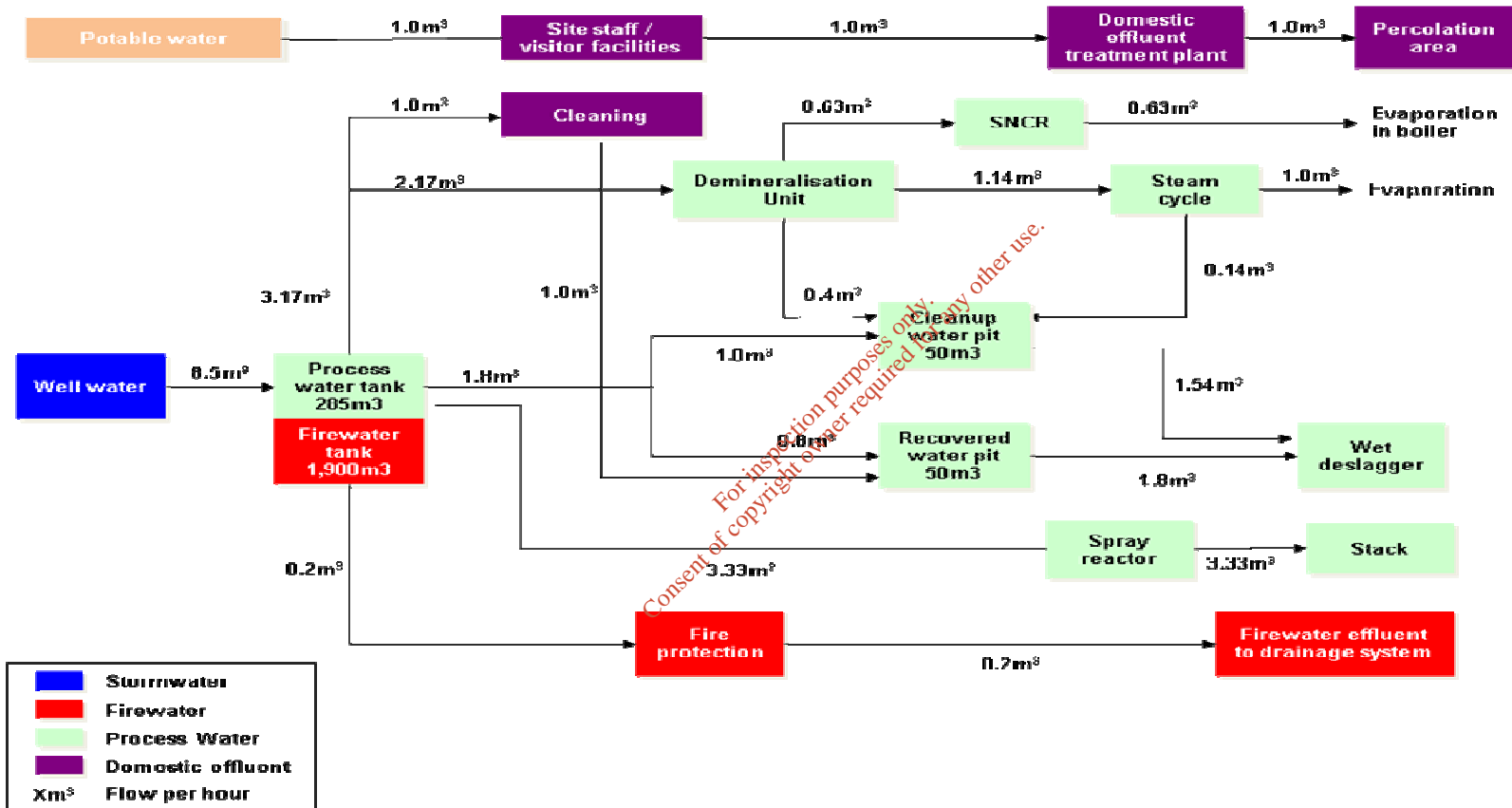
D.1.1.b Water Supply

No changes are proposed to the water supply system at the site. Only a very minor quantity of additional water (c 300l per day) will be abstracted for the proposed development.

A schematic of the onsite water balance is provided in Figure D.1.c.

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Figure D.1.c: Site Water Balance



D.1.1.c Telephone

No changes are proposed to the existing communications systems at the facility.

D.1.m Plant Sheds, Garages and Compounds**D.1.m.a Maintenance Building**

It is proposed to make permanent an existing temporary spare parts warehouse building as described in the accompanying EIS. A description of this building is provided in Chapter 5. The location of this building is shown in Figure D.1.a.

D.1.n Site Accommodation

A description of the accommodation provided at the facility is presented in Chapter 5 of the accompanying EIS. Accommodation is provided at the site at three primary locations namely the site security building, the main process building and the proposed permanent modular office block. The locations of these buildings are shown in Figure D.1.a.

D.1.o Fire control system

This application entails no changes in terms of fire control systems. The main fire safety objectives adopted in the design and operation of the facility are outlined in Chapter 5 of the accompanying EIS.

D.1.p Civic Amenity Sites

Civic amenity facilities are not provided at the facility by direction of An Bord Pleanála in planning reference PL17.219721 (see Appendix B6).

D.1.q Any other waste infrastructure

No other waste recovery infrastructure will be provided at the facility.

D.1.r Composting infrastructure

There will be no composting infrastructure.

D.1.s Construction and demolition waste infrastructure

There will be no construction and demolition waste infrastructure.

D.1.t Incineration infrastructure

A detailed description of the incineration infrastructure of the facility is provided in Chapter 5 of the accompanying EIS.

D.1.t.u Compliance with Waste Incineration Directive

It is submitted that the compliance of the facility with Articles 4(2) and (3) of the Incineration of Waste Directive has been fully demonstrated in previous submissions and applications. Additional detail is available on request.

D.1.v Any Other Infrastructure

There will be no other infrastructure on the site.

Attachment D.2: Description of Processes

The proposed amendments will not entail any significant changes to the nature of the process as already exists. A detailed description of the plant, methods, processes and operations of the facility is provided in Chapter 5 of the accompanying EIS.

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