

ATTACHMENT A1

NON TECHNICAL SUMMARY

Introduction

This is a Non Technical Summary (NTS) of the Environmental Impact Statement (EIS) for the development by Valeco of a combined waste and power facility at Ballard, Araglin, Kilworth, Co. Cork.

The EIS has been prepared to accompany an application to Cork County Council (CCC) for full planning permission for the combined waste and power facility at Ballard. The facility will be operated under a Waste Licence to be issued by the Environmental Protection Agency (EPA).

The proposed facility will consist of an anaerobic digestion (AD) plant and a co-generation power plant. The AD plant will be designed to process some 250,000 tonnes of non-hazardous organic wastes originating in the general Munster area. The co-generation power plant will be capable of producing 32 Mega Watts (MW) of electrical power.

The AD facility will be designed to receive c.190,000 tonnes/year liquid wastes including processing wastes, commercial and industrial sludges which includes sludges from Local Authority waste water treatment plants. The AD facility will also have the capacity to process c.60,000 tonnes of dry waste per year including non-risk meat and bone meal (MBM).

The EIS outlines the scale and scope of the proposed development and describes the existing environment at the development site. The potential impacts resulting from the proposed facility are identified together with the proposed mitigation measures, which will prevent or reduce the identified potential impacts.

Location and Setting

The development site is located in the townland of Ballard, approximately 11 km north-east of Fermoy, 8 km south-east of Mitchelstown and 6.5 km from the village of Kilworth in east County Cork (Figure No. 1). The site is bounded mainly by agricultural land with some forestry to the south.

The facility will be located on a site of approximately 17 hectares (ha). Valeco has an interest in an adjoining 15 ha and which also form part of the planning application (Figure No. 2).

The region is dominated by agricultural lands which is primarily given grassland.

Alternatives

The principal criteria for assessing the viability of this site included an investigation into the following;

- Planning history
- Availability & proximity of waste sources
- Proximity to electricity grid
- Proximity to national gas grid

The existing site has been used for the carrying out of a sludge handling business for the past 15 years.

In August 1998 planning permission was granted by An Bord Pleanála for the collection of biosolids from the agricultural and chemical industries in the general Munster area, the blending of these wastes and the use of the blended product as an agricultural fertiliser.

While the proposed 1998 facility did not proceed, the planning approval granted by An Bord Pleanála gave permission for the acceptance of approximately 30,000m³/year of organic wastes from the same agri-businesses and chemical industries that will supply the proposed combined waste and power facility.

The proposed 1998 facility included 8 No. 7.2 m high tanks for sludge storage on a 3 ha site.

The site has been used for the storage of organic wastes since 1998.

The 1998 grant of planning permission by An Bord Pleanála endorsed the retention of the then current site activities and ultimately that when fully developed the site was permitted to generate an average of 30 heavy goods vehicles (HGV) trips per day (60 movements in and out). The maximum daily number of HGV trips was set by condition in the An Bord Pleanála decision, not to exceed 35 (70 movements per day). The granted hours of operation were 0700 to 2100hrs, excluding Sundays.

The site is located centrally to the production of biosolids in the general Munster area. This arises from the concentration of the agri-food industries in the Cork area generally and the location of many chemical and pharmaceutical production units in the south of the country.

The site is located close to the 110kV national electrical power grid and the natural gas supply pipeline is located to the east of the proposed development area and traverses the site within the ownership boundary (Figure No. 2).

Existing Environment

The development site is set in a rural landscape.

The existing waste infrastructure includes an access road, hard standing for waste handling equipment, sludge lagoons and areas where black spent grain from the brewing industry was previously stored on the site.

The site is serviced by an existing 200m right of way from LS5679 which is approximately 1.1 km. from the rural distributor LP1419 which runs between the Mountain Barrack Crossroads and Kilworth.

The results from air quality and noise surveys carried out at and in the vicinity of the development site were representative of a rural setting.

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The development site is located on the upper slopes of a south/southeast facing valley that drains to the Muchnagh Stream, a tributary of the Araglin River and which is part of the River Blackwater system.

Surface drains at the facility eventually feed into the Muchnagh stream. The Muchnagh Stream flows in a southerly direction into the Araglin River.

A portion of the Araglin valley has been designated as a nature conservation area. The designated area commences close to the confluence of the Muchnagh Stream and the Araglin River and extends along the Blackwater River.

The developed site has no landscape or amenity designation. The Araglin River some 1km to the southeast is the nearest landscape feature. A scenic route (A3) runs - at varying distance - around the east, north and west of the site. Being largely screened by plantations and topography, the site is only readily visible from the southern extent of the route.

There are no recorded archaeological sites within 1km of the site.

The development site is underlain by glacial overburden which in turn overlies sandstone bedrock of the Knockmealdown Formation.

The Knockmealdown Formation is classified by the Geological Survey of Ireland as a locally important aquifer (LI) which is a bedrock aquifer which is moderately productive only in local zones.

Groundwater flow in both the overburden and bedrock follows the topography.

Mammal, bird and freshwater ecology surveys indicate that the property is not of high ecological value. The principal habitats of wet grassland, improved agricultural grassland, hedgerow and treelines are very common in the locality.

The most eastern part of the development site along the Muchnagh Stream is considered to have some conservation importance with respect to plant community types.

Description of the Proposed Development

The proposed development area is confined to the western margin of the landholding.

The existing private residential dwelling, garden and barn will be maintained with the current access road to provide access to the dwelling only.

The facility will include anaerobic digestion technology to treat non-hazardous organic wastes, generate electrical power and produce a useful solid soil conditioner. The proposed facility will provide employment for approximately 30 people during operation.

The facility will be constructed over a number of ground levels. The lower areas to the south east will be constructed some 10m below the upper north west level.

The lowest levels will contain the biofilter, digester, pre-storage, storage and anaerobic tanks. The tanks will be approximately 23m in height and 19m in diameter.

The intermediate level will comprise the waste reception building, storage for soil conditioner and the gas engine stack (40m height).

The upper levels will include buildings for administration, the power plant, fire ponds and garage.

The organic wastes planned to be treated at the waste facility are currently disposed of through land spreading.

The MBM material to be processed at the facility will consist of Category 3 material which consists of non risk animal by-products derived from healthy animals and generated by the Irish rendering industry.

The facility has been designed for continuous operation 24 hours a day 365 days a year. Waste will be accepted at the facility in fully enclosed tankers and covered trailers between the hours 0700-2100 hours, Monday to Saturday inclusive with no deliveries on Sundays or public holidays except in emergency situations.

Deliveries will only be accepted for processing from sources of wastes that have been previously characterised by Valeco as suitable for treatment at the facility.

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It is anticipated that during the six months when the soil conditioner is stored at the site HGV traffic generation is likely to be equal to that of the similar development granted permission by An Bord Pleanála in 1998. During the six month period when soil conditioner is exported from the site the HGV traffic generation is likely to increase by approximately 15%.

Potential Impacts, Mitigation Measures and Likely Significant Effects

The proposed development has the potential to impact on the receiving environment. However, by designing the facility to the best international standards and by operating the facility under a Waste Licence to be issued by the EPA, the potential for impacting on the environment is greatly reduced.

The proposed development is environmentally friendly utilising a carbon neutral process in terms of carbon dioxide emissions and will have a positive impact on the environment.

There will be potential for impact on air quality from dust, odour (from the evaporation tower and biofilter) and gas engine emissions.

Air quality mitigation measures include;

- the implementation of a dust minimisation plan prior to commencement of site works,
- all site vehicles and machinery to be switched off or throttled down to a minimum when not in use, and
- emissions from the gas engine emission point will be governed by regulatory emission limit values (ELVs).

Continuous emission monitors will be installed to ensure compliance with emission limit values and an odour management plan will be prepared to ensure odour emissions are minimised.

While there is a potential for noise impacts from construction and operation of the proposed development, mitigation measures proposed will ensure that the noise levels in the vicinity of the development are within the EPA stipulated guideline values of 55dB(A) and 45dB(A) for daytime and night time noise activities.

Noise mitigation measures include; an earth berm surrounding the site including an acoustic barrier, internal housing of pumps/ air compressors, traffic speed restrictions on site, internal plant layout and design will be to a standard that ensures noise levels outside buildings does not exceed 55dB(A). In addition there will be a regular plant maintenance programme.

The main potential impacts on surface waters arise from silt laden runoff. However, substantial mitigation measures are planned to ensure no significant effects on surface waters downstream of the site.

These include, the installation of silt traps, oil interceptor and attenuation tanks, the use of a hydroslide or similar system to ensure that the rate of the flow in the local stream does not exceed the local authority requirements.

Additional measures include the installation of a truck wash, concrete bunded structures for oil storage tanks and digesters, and the collection and processing of all sewage generated on site within the AD plant.

There will be no significant impact on groundwater from the proposed development.

All substances that would have the potential to cause a negative impact on groundwater will be stored in appropriate sealed areas/ containers or placed within bunded areas.

Sewage or effluent from canteens provided during the construction phase will be fully contained. All effluents will be collected in tanks and exported off site in road tankers to an authorised waste water treatment plant.

All underground piping will be maintained and regularly inspected for integrity.

Wildlife experts will be consulted to provide advice on managing wildlife such as frogs and bats within the development boundary, prior to and during the construction phase. These and other mitigation measures outlined above will ensure no significant effect on the local ecological environment.

The proposal represents a very significant development within a rural landscape. Its construction and early operation may result in significant localised negative landscape and visual impact, most pronounced for those residences located due north, west and east of the site.

The proposed development may be perceived as having longer-term adverse visual impacts; however, while the development will permanently alter the character of its immediate setting, it will not impact adversely on sensitive, vulnerable or designated landscape aspects. Despite visual disamenity, the project has wider environmental positives which, in conjunction with the

development of proposed mitigation will in the long term go towards appreciably mitigating any negative impacts.

Over 25,000 plants of native Irish origin species will be established on approximately 3 hectares around the proposed development. This will provide for some medium to long term screening, significantly assisting in the integration of the development within the landscape and in the restoration of landscape quality.

It is likely that there will be no significant negative impact on material assets such as tourism, agriculture and local infrastructure.

It is proposed to widen the existing LS5679 carriageway to a minimum width of 5.0m over the entire 1.1km and to provide a series of inter-visible passing bays to accommodate the passage of commercial vehicles. The proposed road improvements will be achievable within the bounds of the existing highway lands on the 1.1km stretch of the LS5679 between the LP1419 and the existing site access. In addition it is proposed to relocate and upgrade the existing site access.

It is expected that the projected levels of traffic (average of 2 - 4 HGV per hour) generated by the facility would be likely to have an insignificant impact on the capacity of the roads network serving the facility.

It is recognised that the proposed facility will comprise a relatively large scale development in a rural environment. However, the development will be constructed in accordance with the relevant Regulations and Guidelines, using best practices, with comprehensive mitigation measures to minimise any possible impact on the local environment.

The EIS concludes that there will be no significant effect on the local environment arising out of the proposed development of the combined waste and power facility at Ballard.