Attachment H

Materials Handling

H.1 Raw Materials, Intermediates and Product Handling

Storage Conditions

The proposed facility provides storage on site in three geo-membrane lined storage basins, 4,500 m^3 capacity each. The secondary digester has a 4,300 m^3 capacity. The pre-mix tanks have 220 m^3 and 1,500 m^3 capacity respectively. In addition there are separate plans to provide additional 7,000 m^3 storage on customer farms. This is a total of 22,020 m^3 which is equivalent to 29 weeks output on site (See Site Layout Plan).

Materials Handler

Mobile materials handling equipment is maintained on the facility for out-loading solid material to bulk road vehicles. All machinery that handles material will be washed when required.

Final Storage

Final Storage for the liquid fraction of digestate is in the proposed 3 no 4,300m3 Geo-membrane Lined Storage Basins, details of which are shown in *Drawing 016* in ***Attachment 2*** of the EIS. Since digested slurry must be properly stored and land applied afterwards, its management requires storage tanks to be loaded and unloaded with digested effluent. Thus, a traditional gas tight cover would not be sufficient as air must enter the tank in order to avoid the cover collapsing. The floating cover is floated over the digested liquid fraction surface so that it can move upwards and downwards jointly with the liquid level during loading and unloading operations.

All basins will be fitted with an abstraction point where liquid digestate can be collected for delivery to customer farmers.

The solid fraction of the digestate will be stored in the 3 no Fibre stores, details of which are shown in *Drawing 017* in ***Attachment 2*** of the EIS.

H.2 Waste Prevention

NRGE Ltd. has prepared a Waste Management Plan for the development of a biogas plant to process pig manure from the nearby Pig Unit and co-digest it with imported biomass at Barryshall, Timoleague, Bandon, Co. Cork.

The purpose of this WMP is to ensure that wastes arising from the operation of the proposed Biogas Plant are managed, reused, recovered or disposed of by a method that ensures the provisions of the Waste Management Acts 1996 – 2007 and associated regulations are complied with. It also ensures that the optimum levels of waste reduction, re-use and recycling are achieved.

Waste management priorities of this Project are based on the principle of the EU Waste Management hierarch. The Waste Management Plan is ***Attachment 12*** of the Environmental Impact Statement. A Construction Waste Management Plan has also been carried out and is ***Attachment 9*** of the Environmental Impact Statement.

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H.3 Describe the arrangements for the recovery or disposal of solid and liquid wastes generated at the installation

Source: Fluorescent Tubes

EWC Code: 20 02 21

Animal by-product category per EC Reg. 1069/2009 where relevant: N/A

Quantities: <100kg

Location and method of disposal or recovery: Annual delivery to Chemcar

Source: Domestic Waste

EWC Code: 20 03 01

Animal by-product category per EC Reg. 1069/2009 where relevant: N/A

Quantities: 250kg

Location and method of disposal or recovery: Contractors to be appointed

Source: Metals

EWC Code: 17 04 05

Animal by-product category per EC Reg. 1069/2009 where relevant: N/A

Quantities: Accumulative on-site

Location and method of disposal or recovery: Contractors to be appointed

Source: Concrete

EWC Code: 17 01 01

Animal by-product category per EC Reg. 1069/2009 where relevant: N/A

Quantities: <2500kgs

Location and method of disposal or recovery: Broken/Crushed – reused and utilised for farm road repairs

Source: Timber

EWC Code: 17 02 01

Animal by-product category per EC Reg. 1069/2009 where relevant: N/A

Quantities: <1000kgs

Location and method of disposal or recovery: Cut/Chopped and utilised for domestic firewood

H.4 Waste hierarchy/ H.5 Waste Recycling and Recovery

National Waste Management Policy is set out in 'A Resource Opportunity', the most recent Waste Management Policy published in July 2012. This policy is based on the EU Waste Hierarchy as amended by the EU Waste Framework Directive 2008/98/EC which was transposed into Irish Law by the European Communities (Waste Directive) Regulations 2011 and sets out the measures through which Ireland will further progress necessary to become a recycling society.

An objective of this policy is that when waste is generated, the maximum value must be extracted from the waste through its reuse, recycling, recovery and disposal. In relation to recovery, the Policy recognises the importance of waste as an energy resource and the need to efficiently harness that resource.

The waste hierarchy is:

1. Prevention

2. Preparing for re-use

3. Recycling

4. Other recovery e.g. Energy recovery

5. Disposal

The proposed development of the Anaerobic Digester Facility by Timoleague Agri Gen Ltd. at Barryshall, Timoleague will recover energy from the received waste and is consistent with national waste policy objectives and regulations. It will facilitate the extraction of maximum values from the waste and significantly add towards Ireland's Recovery targets.