WRITTEN QUESTION TO THE MINISTER FOR TRANSPORT AND TECHNICAL SERVICES BY DEPUTY G.C.L. BAUDAINS OF ST. CLEMENT ANSWER TO BE TABLED ON MONDAY 2nd DECEMBER 2013

Question

Further to the Minister's comprehensive reply to my question of 19th November 2013, regarding issues with the new incinerator, would he advise whether the Energy from Waste Plant is able to handle combustible waste regardless of moisture content and, if not, whether any pre-drying process was considered at the design stage and, if so, why it was not installed?

Answer

The Energy from Waste plant (EfW) is capable of processing a wide range of wastes. The plant can process wastes with an energy value between 7.5 MJ/kg and 14 MJ/kg. The lower energy value waste (7.5 MJ/kg) tends to have higher moisture content than the high energy value waste (14 MJ/kg).

When waste enters the bunker it can have a high or low energy value, for example, it can be a substance such as food waste that is very wet and difficult to burn or it can be other material which is dry and will burn well. This waste is mixed in the bunker to form a blended fuel which has a more consistent energy content and thus is easier to process.

When the waste is fed into the incinerator unit it gravitates down the feed chute onto the feed table. This feed table forms the first part of the drying zone. At this point the waste is exposed to the intense heat of the furnace and the moisture content of the waste is reduced. The waste then proceeds to the second zone where it is further dried by the combustion heat and by hot air which is forced up from beneath the grate. This is where the residual drying, gasification and beginning of primary combustion occurs.

The pre-drying process is an integral part of the incinerator design and the plant can handle wastes with variations in moisture content provided that they are appropriately blended in the bunker. This is a standard method of operation for moving grate energy from waste plants such as the La Collette EfW.