## Transport and Technical Services Department Chief Officer



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STATES GREFFE

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Dear Mr Horsfall

## Importation of Waste from Guernsey

Further to your letter dated 7<sup>th</sup> March 2012 to Senator Gorst, Chief Minister, and his response to you dated 13<sup>th</sup> March 2012, I will respond to your questions herewith.

1: The waste will be imported in bale form through the Ferry Port or the Victoria Quay. Having gone through the Guernsey collection, recycling, baling and assembly into a batch, it is likely to be two weeks old. Will it contain any putrefying material that will give off noxious odours?

Answer: If waste is imported from Guernsey it will undoubtedly contain putrefying material that could cause odours if not handled properly. It is envisaged that the waste would be placed in enclosed compacting trailers and shipped to Jersey on a frequent and possibly daily basis. There should be no need to bail the waste prior to shipping it. Upon arrival in Jersey the containers would be transported to the EfW plant and unloaded directly into the EfW storage bunker. The EfW storage bunker employs odour management techniques that successfully prevent odours from escaping the building.

2: Bearing 1. in mind, how long will it take before it is incinerated? Depending on their calorific value it is unlikely that the bales will be burnt whole and will have to be broken down. Also, depending on the waste's calorific value, it may have to be fed in with waste of a higher calorific value as used to happen from time to time at Bellozanne. With the high targets set for recycling by the Guernsey authorities the calorific value is likely to be low as combustibles like paper and cardboard will not be present.

The point is that the imported waste may be hanging around for some time before incineration, increasing the risk of bad odours.

**Answer:** Once the waste has entered the bunker the time taken to process the waste is of lower importance. The bunker is large and deep and waste at the bottom can be there for many weeks before it is processed. This is not unusual and the department has many years experience of bunker management.

The calorific value of the waste is of concern and an appropriate agreement between the Islands specifying the Waste Acceptance Criteria will have to be established. The new EfW can process a wide range of waste calorific values and the plant is able to accept waste of a lower calorific value that that generated in Jersey.

3: Statements have been made to the effect that money will be earned by the sale of electricity to the JEC, produced as a result of burning Guernsey's waste. This is true, but how much depends on the calorific value of the waste received at the Plant. Because of the levels of recycling this may be low and minimum acceptable levels should be set. There have been occasions in the past when some of Jersey's own waste was held back and fed in over time owing to its low calorific value.

The contract should take account of calorific value and a minimum acceptable level set to ensure that the anticipated power generation is achieved and also that the incineration process is not slowed down by having to gradually feed in low calorific value waste.

**Answer:** Taking the second paragraph first, you are absolutely correct that the contract between the Islands would have to take into account the calorific value of the waste.

You are also correct that an increase in waste processed by the plant will generate more income from the sale of electricity to the JEC.

If it is necessary to dispose of large quantities of low calorific waste then it may be necessary to limit the throughput of such waste to enable it to be blended in the bunker with higher calorific value waste. This potential issue should be addressed and resolved by the application of a clear and contractual Waste Acceptance Criteria.

4: After incineration, the residue of toxic ash has to be catered for and a charge for this will no doubt be incorporated if it is to stay in Jersey. If it is re-exported to Guernsey, all well and good but the transport of this material may be subject to international rules that may well change over time and this eventuality should be covered in any agreement.

Should the ash remain in Jersey, the present method of stockpiling it in concrete silos may be acceptable but what happens when the present facility can take no more? That problem will have to be solved but the addition of the Guernsey ash will bring that time and its cost nearer and this must be factored in to any agreement.

Answer: The storage and disposal of ash is an emotive subject, however it is very unlikely that the ash from Guernsey waste would remain in Jersey. Whilst it is always possible that international regulations regarding the shipment and transport of waste may change in the future a good record of responsible ash shipment and management would be used in mitigation if external pressure were to be used to prevent the shipment of ash. Ultimately the contract between the Islands would have to have a break clause to protect both parties from suffering the consequence of revised legislation.

5: It is likely that making greater use of the plant will shorten its overall life and this entails a cost which must also be factored in to any agreement.

**Answer:** The Design Life of the plant is 30 years. The Design Life is defined as the period of time over which the plant is expected to continue to meet its Guarantee Performance Levels with predictable operating and maintenance costs and without the necessity to rebuild major structural elements of the installations.

The plant has been designed to process up to 105,000 tonnes of waste at a calorific value of 9.2 MJ/kg per annum for a 30 year period.

It is true that processing the waste from Guernsey will accelerate the wear of some consumable components on the plant however a portion of the gate fee from that waste would be used to increase maintenance accordingly.

6: In the past there have been occasions when Jersey has had to stockpile its waste in different locations and there have been mountains of stinking waste at Bellozanne, La Crete Quarry near Anne Port, and other locations.

The reason for this has been either mechanical break-down or the incinerators at Bellozanne or else industrial action taken by the workforce.

This should be factored in to the contract on the basis that any forced stockpiling of Guernsey waste must take place in Guernsey as we would have a big enough problem stockpiling our own.

Answer: Again you have correctly identified one of the major risks with waste management on an Island with no landfill disposal route or alternative disposal method. Protection from this type of scenario and a clear definition of who is responsible for and has ownership of the waste would have to be written into any agreement with Guernsey.

7: In the future it is possible that international conventions may set more stringent limits on disposal and transport of toxic material and, most likely, on the level of carbon emissions from communities.

With the proposed agreement, Guernsey effectively will export its carbon emissions from the burning of waste to Jersey. It would be unfortunate, to say the least, if Jersey has a serious carbon emission problem because of this and Guernsey did not.

This arrangement is for the long term and one cannot foresee what rules may apply regarding carbon emissions in the future. Perhaps the answer lies in some provision for carbon trading if the need arises. In any event some safeguards must be introduced in the agreement.

Answer: The principle of Guernsey retaining its carbon emissions is an excellent idea. At the moment we believe that under the EU Emissions Trading scheme and the UK Carbon reduction Commitment, Energy from Waste plants are exempt. It is possible that these schemes may change in the future so the department would have to seek expert advice on the matter.

We greatly value your interest in this subject and would be very happy to meet with you and discuss your issues in person combined with a site visit. If you would be interested please do not hesitate to contact me.

Yours sincerely

John Rogers Chief Officer

Cc Senator Ian Gorst, Chief Minister