## WRITTEN QUESTION TO THE MINISTER FOR TRANSPORT AND TECHNICAL SERVICES BY THE DEPUTY OF ST. MARY ANSWER TO BE TABLED ON TUESDAY 24TH FEBRUARY 2009

## Question

When were the original two streams at Bellozanne commissioned?

When was the third stream commissioned?

Are they run simultaneously or individually or in other combinations, and if so, which?

What flue gas treatment has been fitted on the three streams?

What are the actual current pollution levels from each stream?

What was the design life of the third stream on commissioning?

What is the remaining design life of the third stream?

## **Answer**

The original two streams were commissioned in 1979.

The third stream was commissioned in 2002/3.

They are operated in any combination of the three, subject to maintenance and availability.

The only flue gas treatment system fitted to all three streams is Electro Static precipitators to remove the larger dust particles from the exhaust gas stream.

The pollutant levels for the existing plant are shown in the table below and provide Members with a comparison between the existing plant and the Waste Incineration directive WID that the new plant will have to comply with:

Table 8.4 - Source and Emissions Data					
Item	Unit	Current (Bellozanne)		Proposed Facility (La Collette)	
Emissions		Conc. (mg/m³)	Rate (g/s)	Conc. (mg/m³)	Rate (g/s)
Oxides of nitrogen (as NO2)		400	7.867	200	5.058
Sulphur dioxide		600	11.80	50	1.264
Carbon monoxide		100	1.967	50	1.264
Particulates (PM10)		50	0.983	10	0.253
Hydrogen Chloride		700	13.77	10	0.253
Hydrogen Fluoride		1.5	0.030	1	0.025
Ammonia		-	-	10	0.253
VOCs		10	0.197	10	0.253
Mercury		0.05	0.98 mg/s	0.05	1.3 mg/s
Cadmium and Thallium		0.3	5.90 mg/s	0.05	1.3 mg/s
Other Metals		5	0.098	0.5	12.6 mg/s
PAHs (as B[a]P)		0.0001	1.97 μg/s	0.0001	2.53 μg/s
Dioxins and Furans		12 ng/m3	236 ng/s	0.1 ng/m <sup>3</sup>	2.53 ng/s

## Notes:

Emission concentrations are for dry flue gas, at reference conditions of 11% oxygen, 273°K and 1 atmosphere to allow direct comparison between different facilities. For the new facility, concentrations are assumed to be at the limits of the Waste Incineration Directive, except for ammonia and PAHs, where no limits are stated. This will overestimate the impact of the emissions, as the facility will operate below these limits. For the current facility, concentrations are measured values where available.

Emission rates are corrected to the actual flue gas conditions.

"Other Metals" are Antimony, Arsenic, Chromium, Cobalt, Copper, Lead, Manganese, Nickel, Vanadium.

A description of the units is given in the glossary in Section 18.2.

The design life for the third stream was 20-25 years.

The remaining life of the third stream is between four and nine years but it is not the design life for the third stream that is the deciding factor on how much longer it can operate, it is the current emission levels and the condition of the surrounding plant that was constructed in 1979. This plant on which the third stream is totally reliant is now 30 years old and given its original design life of 20-25 years it is well beyond providing reliable and safe operation for the disposal of the island's residual waste. The most recent examples of the failure of the crane support mechanism and chimney are key indicators that the main plant is beyond continued economic, reliable and safe operation.