

**Scotgen (Dumfries) Ltd**

**Dargavel Energy from Waste Facility**

**Commissioning Progress Monthly Report for September  
2010**

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## 1. Summary

Commissioning activities were recommenced during March and continued throughout September. The amendment of the boiler front end on an interim basis was completed physically in February. The interim amendment has been adopted and confirmed as part of a Regulation 12 application made by Scotgen to SEPA.

A gasification trial was already underway on Stream 1 at the start of the month, where another sequence of 14 cycles were completed successfully in September. This was repeated with Stream 2 commencing on the 3<sup>rd</sup> of September and continuing through to the 13<sup>th</sup> of September. 24 cycles were completed on this trial. This trial was brought to a normal phased shutdown when the boiler was ready for cleaning. Stream 1 performed a series of trials over 34 cycles between the 15<sup>th</sup> and the 30<sup>th</sup> of September. Stream 2 began a further trial on the 20<sup>th</sup> of September; this trial was progressed to the end of the month when 14 cycles had been completed in sequence. During September a total of 86 cycles were completed successfully. Each of these series of gasifications included a sequence of cycles across each stream of 4 primary chambers (PGC's 1-4 & PGC's 5-8) to include a waste fuel mix that included material with a hazardous waste content. Time off-line for each Stream was spent cleaning and inspecting the amendment of the boiler front end. Streams were brought back on line once all items were satisfactorily returned ready for further duty.

There were breaches of the permit during September. These have been reported separately to SEPA.

The turbine package remains under construction.

## 2. Introduction

Scotgen have been issued a Permit by the Scottish Environmental Protection Agency (SEPA) to operate a waste gasification facility at Dargavel, Dumfries. The Permit number is PPC/A/1022412. Clause 3.9.5 requires the operator to submit a monthly report during the Commissioning period. This is the fifteenth report and covers the month of September 2010.

## 3. Commissioning Activities undertaken during September

A series of gasification trials were carried out on both streams. Gasifiers containing both wholly non hazardous fuel and mixed hazardous and non hazardous fuel was used through out all of these trials. The initial chambers were loaded with wholly non hazardous material with remaining chambers containing a mixture of hazardous and non hazardous materials. Both streams were operational together for a period. In excess of 85 cycles were completed during the period of September. Only minor modification was carried out during September, the intention being to monitor the stability of the changes made previously. These were modifications made to the combustion air management and control resulting in improvements in the performance of the cycles experienced and improvements in the syngas quality, reducing the burner operation in the SCC (Secondary combustion chamber). Data gathering for commissioning continues. Contractor performance trials are still to be undertaken on the main gasification and combustion side equipment. This item is restricting the timetabling of other performance trials on the plant as a whole. Scotgen have

provided to SEPA a scheduled timetable for the completion of the commissioning activities including the testing required under the permit.

#### 4. Tests undertaken during September

No specific tests as required by the Permit, section 3.9, were completed during September.

#### 5. Results of tests undertaken during September

No specific tests as required by the Permit, section 3.9, were completed during September.

#### 6. Justification for delays from the notified dates

No further delays were experienced other than ongoing breaks between batches for control software development, these were minor during September. Inspection and cleaning of the boiler sections is ongoing between gasification trials with replacement of cooling tubes being carried out as and when necessary.

#### 7. Condition 3.9.3(g) criteria. (any completed commissioning activities or tests).

No tests have been completed against the criteria of Condition 3.9.3 (g).