

Non-Technical Summary

A Pollution Prevention Control permit (PPC permit) (Ref: PPC/A/1157446) was granted by SEPA to Earls Gate Energy Centre Limited (EGEC) for the Earls Gate Energy Centre (herein referred to as the Facility) on 7 March 2018. A Variation to the PPC Permit was granted by SEPA, dated 30 May 2019.

EGEC are proposing a further Variation to the PPC Permit to allow for ten further changes. These are as follows:

1. Increasing the processing capacity of the CHP Plant from 236,500 tonnes per annum to 274,000 tonnes per annum and increase the instantaneous throughput from 31.8 tonnes per hour to 34.3 tonnes per hour.
2. Extending the potential hours for the delivery of waste to the Facility from those permitted in the PPC permit, of:
 - Monday to Friday (0800 hours to 1800 hours) and Saturday (0800 hours to 1200 hours);to the proposed hours of:
 - Monday to Friday (0700 hours to 2200 hours) and Saturday (0700 hours to 1700 hours).
3. The simultaneous operation of five back-up boilers and the CHP Plant.
4. Include an AQA sensitivity analysis to support a revised location of the back-up boiler stack positioned in error during construction.
5. Include an AQA sensitivity analysis to support a revised location of the CHP Plant stack positioned in error during construction.
6. Include an AQA sensitivity analysis to support a revised location of the Odour stack that has been repositioned through the design optimisation process.
7. Optimise the effluent composition from the Facility to include the gas fired back-up boilers and associated balance of plant complete with an updated H1 analysis.
8. Adjust the effluent peak and average discharge capacities from the currently defined “no steam export” capacity to allow for the maximum discharge arrangements associated with the maximum steam export to the Earls Gate Park development. This will also include for amendments to the emission limits for emissions to water to align with the design of the water treatment systems and lead to an increase of 110 m³/day in the quantity of effluent discharged from the Facility.
9. Exclude limits on the volume of rainwater run-off from the Facility.
10. Additional layout changes due to optimisation of the Facility.

The proposed increase in the permitted capacity of the CHP Plant is to reflect the maximum capacity of the proposed design of the Facility to allow for the full range of calorific value waste fuels which the boiler has been designed to process.

The proposed extension in delivery hours is required to allow for a normalised and smoother frequency of delivery rates for waste to the CHP Plant, improved traffic flows within the Facility, and to minimise the potential for queueing within the Facility.

The proposed simultaneous operation of five back-up boilers and the CHP plant is to allow for EGEC to deliver its obligations under their Capacity Market Agreement if there is a System Stress Event declared by National Grid.

The proposed changes regarding revised positions of the stacks, effluent discharge rates and compositions are necessary to enable the PPC permit to reflect the evolution and optimisation of the design of the Facility and represent a worst-case operating scenario for discharges of

wastewater from the water treatment and effluent from the back-up boilers. It is proposed to align the PPC permit with the proposed design of the Facility.

As demonstrated within this application, the changes proposed to the PPC permit as set out within this application will not have a significant impact on human health and the environment. However, following consultation with SEPA prior to submission of the application, EGEC has been advised by SEPA that the application will be classified as a Substantial Variation.