

Beddington ERF | permit variation | January 2022

This briefing has been prepared for officers of the South London Waste Partnership and members of the Joint Waste Committee.

Summary

Viridor has applied to the UK's environmental regulator, the Environment Agency, to make variations to its environmental permit to enable enhanced operations at the Beddington Energy Recovery Facility (ERF). All waste management facilities in the UK are required to hold an environmental permit to ensure that the ERF does not cause harm to human health or the environment. If an operator fails to comply with the conditions of the permit, the Environment Agency have the powers to shut down the facility.

This variation is being submitted following extensive reviews of the performance of the Beddington ERF which have concluded that it has ability to treat additional waste safely and without causing negative impacts to the surrounding environment or the operating efficiency of the plant.

As a region the SE and greater London area continues to see an increase in residual waste volumes with large quantities either being exported to European ERF's or directed to UK landfill (the numbers of which continue to decline). Optimising the capacity of existing ERF's as Viridor are proposing for Beddington, enables waste to move higher up the waste hierarchy by diverting it away from landfill, reduces carbon emissions and produces electricity. It also enables the UK to become more self-sufficient reducing the amount of waste exported. Across the UK many ERFs are completing similar permit variations to enable them to meet UK's residual waste disposal needs.

What is being varied?

Viridor is applying to the Environment Agency to vary its existing environmental permit to increase the maximum continuous rating (MCR) of the ERF to 110%. The 'MCR' is a classification of the power output of a power station in the UK.

Effectively this means that the ERF can process waste safely at a faster rate than previously conducted leading to the option for Viridor to process more waste per year. Viridor has worked with technical specialists to ensure that the ERF's existing instrumentation and controls are suitable and sufficient to enable the ERF to operate safely at this level.

Before this variation has been made extensive technical assessments have been undertaken to understand the potential impacts of this change and can demonstrate that by operating at up to 110% MCR the facility would still continue to operate within the limits of the environmental permit and process up to 382,000 tonnes per annum.

Process to vary the environmental permit

Viridor has been preparing and collecting data from the Beddington ERF over the past 12 months to support the application and this will be included in the submission to the Environment Agency. The application will be considered as a Substantial Variation meaning it is unlikely to be reviewed in detail by the Environment Agency for at least 29 to 33 weeks from submission date.

The application was submitted in December 2021 and will be validated and posted on the Environment Agency's website for public consultation in the summer with an expected determination date in late 2022.

During this period of consultation, members of the community will be able to review the technical information and share feedback with the Environment Agency to support in the determination of the application. Following a technical review, it has been established that there is no requirement to vary the planning permission granted in 2012 for the Beddington ERF.

Impacts on air quality

The submission includes a newly modelled Air Quality Assessment and Human Health Risk Assessment detailing the updated emissions from the stacks. These assessments measure and quantify the impacts of the revised operations at the Beddington ERF against the acceptable limits issued by the World Health Organisation. All associated reports will be made available during the public consultation.

Impact on tonnage (amount of waste treated)

The Beddington ERF was originally designed to treat up to 302,500 tonnes of waste to initially meet the needs of the South London Waste Partnership and regional commercial waste arisings. Since the completion of the ERF in 2019 the facility has been performing to a high standard with increasing availability and Viridor submitted a permit variation in December 2020 to increase the total tonnage of waste that can be treated at the ERF to c. 347,000 tonnes per annum.

Whilst this latest variation increases the maximum tonnage that Beddington ERF is able to treat, (up to 382,000 tonnes per annum), this does not mean this volume will be treated year on year. Viridor will gradually increase the volume of waste treated in a phased ramp up with continual inspections to ensure the ERF is performing in accordance with its environmental permit and maintenance regimes. In years where there is a maintenance outage or lower processing rates, it is expected the total tonnes treated will be much lower.

How can the ERF operate at 100% of the time and process waste more quickly?

Viridor has undertaken a series of inspections and performance tests over the past 18 months to assess the capability of the ERF to process increased volumes of waste. At all times Viridor will complete the appropriate inspections and maintenance will be conducted to ensure full compliance with health, safety and environmental standards.

Impact on vehicle movements

As part of the planning permission for the Beddington ERF, traffic assessments were completed to assess the potential impact of the facility on the existing road network. These assessments factor in predicted traffic volumes over the years that the ERF will be operational without negatively impacting the local road network. The Beddington ERF is permitted to accept up to 96,739 vehicles over the weighbridge at the facility each year.

Currently payloads of vehicles delivering to the facility vary and range from larger articulated HGV's, to refuse collection vehicles and smaller cages and vans. In the last 12 months slightly over 65,000 vehicle movements have been made. The proposed variation would increase projected vehicle movements to up to 76,000 per annum, below the threshold outlined in the planning permission. However, this would vary year to year depending on the calorific value of the waste being processed.

Next steps

Viridor submitted its application to vary the environmental permit in December 2021, with the public consultation anticipated in summer 2022. Viridor's technical team will be available throughout the process to support community members with any questions that they may have about the application.