



Planning application for the installation of a fire suppression and prevention system.

Biffa Waste Services, Burgess Hill Household Waste Recycling Centre & Transfer Station, Fairbridge Way, Burgess Hill, West Sussex, RH15 8AR

June 2025

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1. Introduction

Biffa Waste Services ('Biffa') is applying to West Sussex County Council ('WSCC') in order to seek planning permission for the installation of a new fire suppression and prevention system at the Burgess Hill Household Waste Recycling Centre ("HWRC") and Transfer Station ("TS"), Fairbridge Way, Burgess Hill, West Sussex, RH15 8AR.

2. The site and surrounding area

Biffa acquired the Burgess Hill site in 2021 as part of a larger acquisition between Biffa and the site's previous operator Viridor.

The site in its entirety is 1.6 hectares and lies to the north of Burgess Hill. It is accessed from Fairbridge Way, which links directly to the roundabout junction of the A273 Isaacs Lane and B2036 Cuckfield Road.

The site sits within a hollow and is well screened with mature trees and vegetation along most boundaries. The surrounding land uses are mainly industrial or residential in nature.

The closest houses are about approx. 50 metres away in the newly developed Eastbridge Avenue. The site is formed of a Household Waste Recycling operation where members of the public can dispose of household waste for onward recycling, and a Waste Transfer Station where waste is deposited by local collection services and then transferred on for further treatment or disposal.

3. Background

The risk of fires at waste management facilities has greatly increased in recent years largely due to the prevalence of lithium batteries in a multitude of products. In May 2024, the National Fire Chiefs Council stated that:

"Lithium-ion batteries are hidden inside many everyday household electricals, from laptops, mobile phones and tablets to electric toothbrushes, vapes and EarPods. These batteries can become crushed or damaged in bin lorries or waste sites if they aren't recycled and can lead to fires at waste centres and in bin lorries across the UK. When crushed or damaged lithium-ion batteries can be dangerous to the public, waste operators and firefighters as they cause fires that are especially challenging to tackle. They can lead to explosions and chemical

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exposure, but they create their own oxygen, which means they can keep reigniting, prolonging incidents with smoke and fumes affecting neighbouring areas and communities for long periods of time of up to a week.”

To demonstrate the extent of the problem around 6bn batteries were thrown away in the last year, over 3,000 a minute – including over 1.1bn electricals containing hidden lithium-ion batteries^{[2][3]}. There were over 1,200 fires in the waste system in the last 12 months, compared to 700 in 2022.^[4] A survey of local authorities across the UK has also found that 94% of them said that fires caused by batteries in the waste stream were an increasing challenge^[5].

4. The Proposed Development

To minimise the risk of fire at the established waste management facility, this application is seeking planning permission to allow Biffa to install a new fire suppression and prevention system which requires the installation of some external plant and machinery as shown in the accompanying drawings.

The proposed Helios Fire Prevention and Suppression System is state-of-the art and designed to be used where sprinkler and spray water systems offer insufficient protection. The proposed fire system is fully automated and does not rely on a human being to identify a fire. The Helios system utilises infrared heat detection cameras that monitor stockpiles and identifies heat spots before a fire is noticeable to the human eye with the system able to recognise the early signs of a fire and take immediate action through the automatic deployment of water cannons before the fire can take hold.

This system will require the installation of one antivandal steel container in red (RAL3000) measuring 6.5m x 2.5m x 2.m and would house the system’s main pumping station, and one glass reinforced plastic 90,000-litre water tank in Goose Wing Grey (RAL9006) which would measure 10m x 3m x 3m. It is proposed to install the system using a stacked formation with the main pumping station below, and the water tank above. The total dimensions when stacked will measure 10.5m (l) x 3.5m (w) x 6.5m (h).



Photo Above: (Example) Helios System in stacked formation.

Both the container and the tank would be installed externally on a suitable concrete plinth adjacent to the main operational building and supported by a steel framed structure. The system would be protected from vehicle movements by an Armco safety barrier. Associated pipework would then feed from the pumping station container, through the building and connect to the internal infrastructure such as the water cannons/turrets. The system will be connected to the sites existing mains water supply in order to top up the fire-fighting water supply.

In the event of a fire at the site, any fire water would be contained on site and pumped away.

5. Environmental Considerations

Noise

Although it is not anticipated that the proposal would have any adverse noise impact, a full noise assessment has been completed and submitted to WSCC alongside this application. It would be considered inappropriate to assess noise impacts during full system operation, i.e., in the protection of life and /or property scenario. However, an assessment has taken place focused on the maintenance requirements of the system.

The backup generator would also be tested due to its very infrequent use. In most cases where identical systems have been installed at other locations, the operational hours have been less than 5 hours in an entire year. This testing of the generator would be completed quarterly and at the required service schedules set out by the manufacturer. The operating noise levels of the super silent generators are 65db approx. However, if power outages were experienced, then the generator would run until power supplies were restored to ensure the system's operation in the event of a fire.

Although the noise assessment does highlight that during some testing, the specific sound level would exceed existing background levels, the existing ambient noise level adjacent to the identified receptor is not dissimilar in magnitude to that predicted for the emergency fire protection system which unless in the event of a fire, would only be operated infrequently for testing purposes. Overall, the impact to any potential receptors would be Low.

The Noise Impact Assessment highlights that due to the nature of the proposal being potentially life saving equipment, the proposed safety equipment should be deemed

acceptable with respect to overarching requirements for planning and noise, such that noise should not present reasonable grounds for planning refusal.

6. Relevant Planning Policies

When preparing this application, the following planning policies have been reviewed. However, there are very few specific planning policies that apply on this occasion due to the very minor scale of the proposed plant.

- West Sussex Waste Local Plan (WLP) (2014)
- National Planning Policy Framework (NPPF) (2021)

Policy W19(a) of the WLP states *“Lighting, noise, dust, odours and other emissions, including those arising from traffic, are controlled to the extent that there will not be an unacceptable impact on public health and amenity”*. As demonstrated in this statement and the accompanying documentation, the proposal is considered to be in accordance with policy W19(a) of the WLP.

7. Summary and Conclusions

There is an increasing risk of fires within the waste management network largely due to the prevalence of lithium batteries and that they are inappropriately discarded in either general waste or recyclable materials by households and businesses.

Lithium batteries are able to hold a powerful charge and when damaged can cause intense fires that are capable of reigniting as the batteries can effectively create their own oxygen and therefore these types of fire are challenging for fire fighters to tackle and state-of-the-art fire prevention systems can make all the difference in controlling a fire during the crucial initial stages even extinguishing it before the Fire Service arrive at site.

If a fire is not controlled in the initial stages, it can burn uncontrollably and lead to increased dangers for fire fighters, significant disruption to the local area and the loss of the facility. Biffa is therefore rolling out a multi-million-pound investment programme in Helios Fire Suppression Systems to minimise the risk of fires at Biffa’s waste management facilities.

The proposed development is within a long-established waste management facility and is considered acceptable as the scale of built development is minimal, the design is in keeping with the wider site and is appropriate for its function.

We trust that the information set out within this planning application is satisfactory to enable planning permission to be issued. However, if you require clarification on any of the above or enclosed, please do not hesitate to contact me.

Yours faithfully

For Biffa Waste Services Ltd

A handwritten signature in dark ink, appearing to read 'D Barritt', is positioned below the company name.

Daniel Barritt
Planning Support Manager