

# The Sustainable Treatment of Healthcare Risk Waste

Proposal for the development of a state-of-the-art Healthcare Risk Waste processing facility

environment matters

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#### What is Healthcare Risk Waste (HRW)?

## *ΕΛVӘ*

Healthcare Risk Waste (HRW) arises from natal care, treatment or prevention of disease in humans and animals. The waste may include items such as, swabs, wipes, bandages, gloves, aprons, syringes & scalpels, etc.

It is critical that HRW is managed in a controlled manner to ensure that both the community and the environment are protected.

Volumes of Healthcare Risk Waste are increasing globally with contributory factors including an aging population and advances in new treatments and procedures. Enhanced hygiene practices and the increased use of single use Personal Protective Equipment (P.P.E.) such as gloves, wipes, and aprons have dramatically increased the volume of HRW but not necessarily the density. 'Volumes of HRW are anticipated to continue increasing beyond 2032'. <u>https://www.gminsights.com/industry-analysis/</u> medical-waste-management-market

This new facility will provide Increased treatment capacity that will futureproof Ireland's ability to meet these needs and respond to the consequences of future potential pandemics.



#### Proposal

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Enva is proposing to construct a state-of- the-art processing facility that will safely treat HRW. As an added sustainable benefit, and once the waste is treated, it will be used to generate electricity which will be transmitted into the National Grid displacing the use of fossil fuels in the process.

As well as the environmental benefits this will provide, the development will add significant and necessary capacity to the healthcare sector.

Renewable energy generated on site through the installation of solar panels will further reduce our carbon footprint.



### *ΕΛVӘ*

Our dedication to developing new and innovative products and solutions while preserving the world's resources is driving our business forward. Enva is committed to bringing one new innovative recovery solution to market every year for the next decade and helping to create a circular economy.

Tom Walsh, CEO

#### Location



Proposed development: Building 1, 402 Grants Drive Greenogue Business Park Greenogue, Rathcoole Co. Dublin, Eircode D24 AP04.



### This site is currently **licensed** by the **EPA** to process **111,000 tonnes per year of various waste types.**

There will be no change in overall tonnage of waste treated at the facility as Enva will reduce the management of existing waste types at the facility by an equivalent amount in keeping with the conditions of the EPA licence'.

#### Use of Technology



The Best Available Techniques Reference Document (BREF) for Waste Treatment is a technical guidance document published by the European Commission. The BREF provides guidance to regulators, on Best Available Techniques (BAT) for treating waste.

This document provides guidance on technologies to treat HRW, including 'physico- chemical' treatment:

### "Sterilisation pre-treatment of healthcare waste prior to incineration of healthcare waste may be carried out by thermal treatment, for instance, with thermal screws."

Enva has chosen this long-established non-burn technology whereby waste is delivered in locked wheelie bins and introduced to a fully automated process whereby the waste is treated rendering it inert.



#### **Quality Controls**

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The proven steam technology shall be operated under the strict regulatory controls of the Environmental Protection Agency (EPA) and the process will be independently verified and validated by an appropriately certified laboratory.

Management controls will include microbiological challenge tests, while software monitoring will be employed to guarantee that the waste is sterilized before leaving site in accordance with the conditions of the EPA licence.

Both manual and digital records will be maintained on site for several years in accordance with the terms of the EPA licence.

Emissions both to air and foul sewer will be monitored independently ensuring that the conditions of the EPA licence are met.



For further information please contact marketing@enva.com

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