Environmental Permit (Variation)
WEPA UK Ltd, Bridgend Paper Mill, Llangynwyd, Bridgend, CF34 9RS

Non-Technical Summary (NTS) (Permit No. EPR/EP3738NG)

023-1944 | August 2024 | Revision 00

Introduction

This document has been prepared by WEPA UK Ltd ("WEPA") and its environmental consultant Earth & Marine Environmental Consultants Ltd ("EAME") in support of a permit variation as required under Regulation 20 of the *Environmental Permitting (England and Wales) Regulations 2016* in relation to current activities and proposed activities to be undertaken at WEPA UK Ltd, Bridgend Paper Mill, Llangynwyd, Bridgend, CF34 9RS (Permit No. EPR/EP3738NG).

This application is to vary an existing environmental permit in relation to operations and activities undertaken the site (*Figure 1*).

The document represents the Non-technical Summary report submitted as part of the variation package to Natural Resources Wales (NRW) (EAME Project Ref. 023-1944).

WEPA UK Ltd

WEPA UK is one of the leading suppliers of household paper in the country, manufacturing own label toilet paper products for most the UK's major retailers. In the early 1980s, WEPA took the decision to move into recycled paper; an area which is growing steadily in importance within the total UK paper market.

Between 2021-2022, an investment of over £100m was made in a new paper line furthering the capabilities of the UK business.

Additional information can be obtained from https://www.wepa.eu/uk/

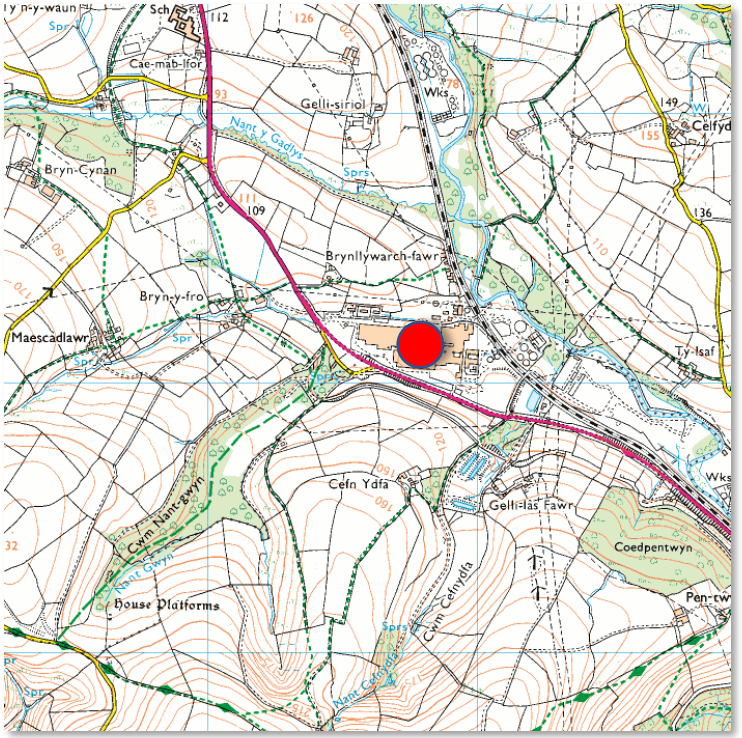


Figure 1: *Site Location - Ordnance Survey Map Extract (1:25,000)*
Ordnance Survey 1: 25,000 scale map with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright Earth and Marine Environmental Consultants Ltd, Licence No. 100050755

S02 Proposed Change - CHP

Introduction

This environmental permit application (variation) relates to the following changes, as outlined below.

CHP and Gas-fired Boilers

- **Installation** of two new gas-fired boilers within a standalone boiler house with associated fuel supply and stacks (within a shared/combined windshield).
- **Removal** of the existing Combined Heat and Power (CHP) unit and associated stacks (emission points A1 and A2). The units will be decommissioned and removed once the new gas-fired boiler house is commissioned.

The installation currently includes a CHP Plant with a net thermal input of less than 50MW which supplies the entire steam demand of the papermaking operation and approximately 50% of the electrical power of the mill. When the CHP is aggregated with the paper machine hood burner rating it became a Part A(1) combustion activity. The CHP plant is natural gas fired with the capacity for supplementary gas oil firing. The plant comprises of two Gas turbines with a single 37m stack and a shell boiler with a 30m stack.

Justification

The original CHP and associated gas turbines (GTs) were installed over 30 years ago and, as such, although considered a Best Available Technique (BAT), the performance of the system under current load was deemed insufficient.

In 2020 NOx emissions were around 250 mg/m^3 i.e. well above the required Emission Limit Value (ELV) and expected performance for an CHP installation. WEPA had planned to invest in wet NOx control, however, following implementation of the UK Government British Industry Supercharger (BIS) scheme WEPA now propose to install new Low NOx steam boilers replacing the CHP, which will be decommissioned.

S03 Proposed Change – Waste

Waste

Addition of four specific (non-hazardous) List of Waste (LoW) Codes to allow the receipt, storage and processing of wastepaper within the existing processes.

WEPA is applying to include externally sourced wastepaper, known as “broke”, to be included in Schedule 2 (waste types, raw materials and fuels), Table S2.1 of the permit Ref. EPR/EP3738NG.

All the input wastepaper will be fully consumed on-site within the existing processes.

Waste codes that are being applied for are as follows:

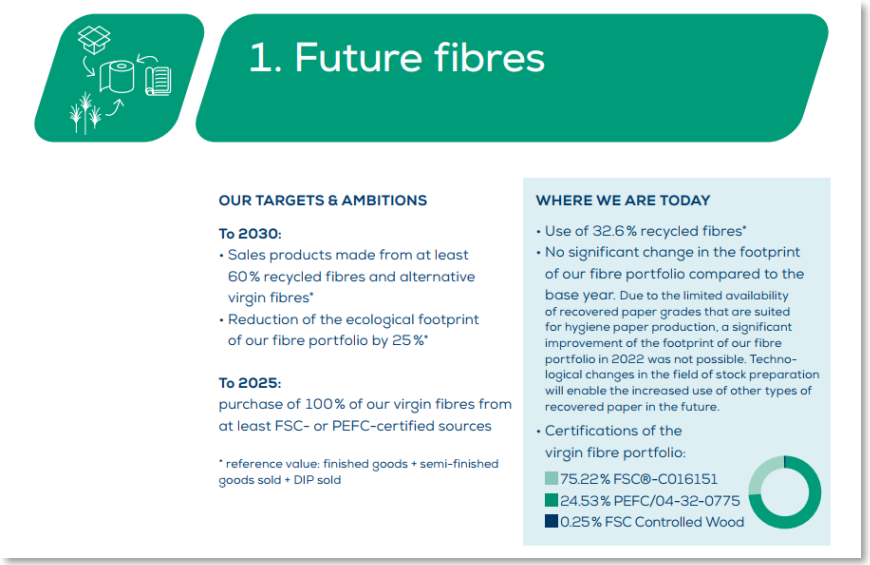
- 03 03 08 – wastes from sorting of paper and cardboard destined for recycling
- 15 01 01 – paper and cardboard packaging
- 19 12 01 – paper and cardboard
- 20 01 01 – paper and cardboard

All waste materials will be stored and handled in-line with NRW’s Fire Prevention Management Plan guidance.

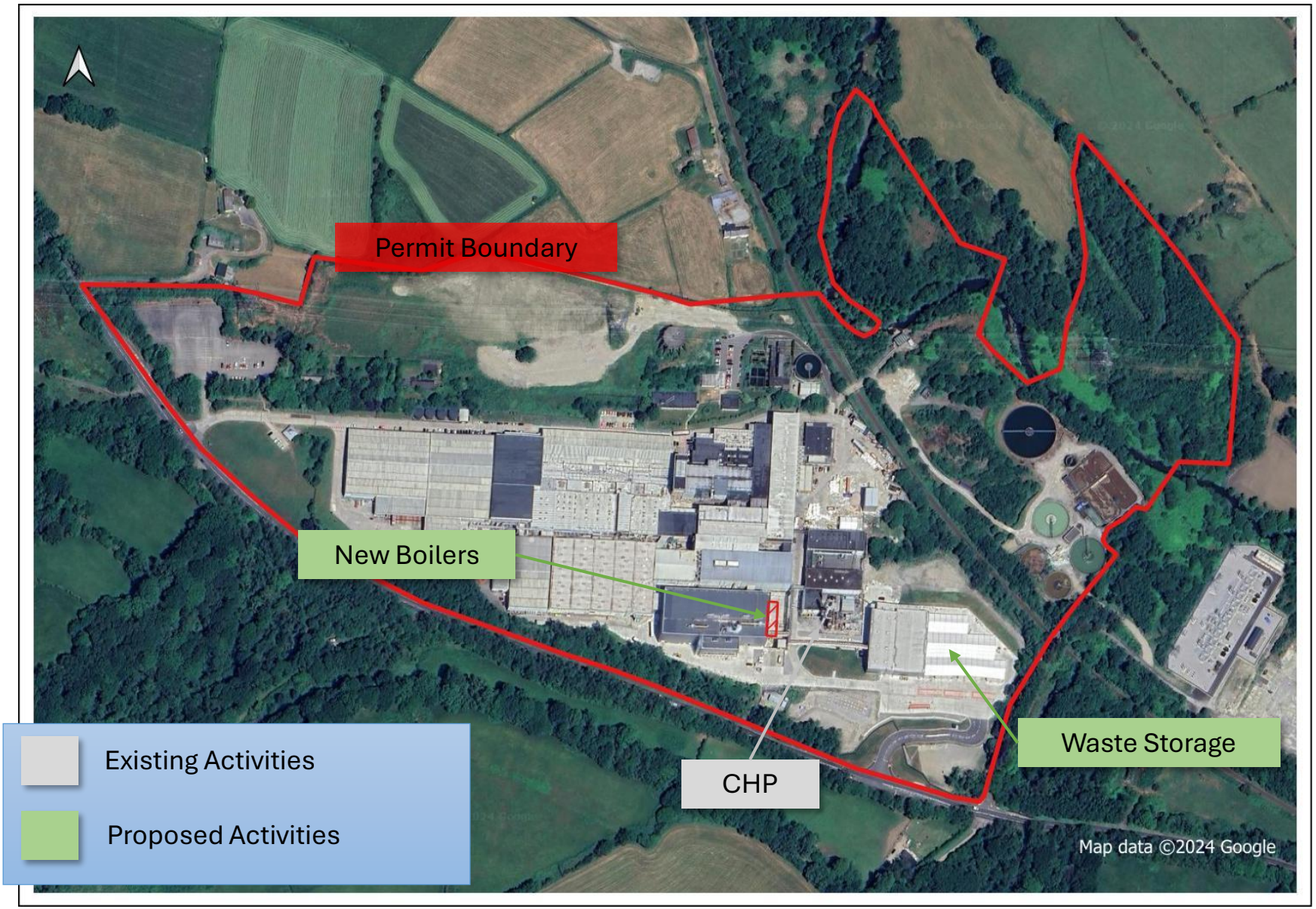
Justification

The wastepaper will be fully recycled on-site to produce finished products, namely tissue paper and kitchen towel. This is part of the company’s sustainability strategy to increase the percentage of recycled paper vs virgin pulp that’s contained within the finished product portfolio.

The changes align with the aims and objectives of the circular economy.



S04 Site Layout (Areas Subject to Variation)



Management Systems

WEPA UK Ltd has implemented and maintains an Environmental Management System (EMS) that is certified to ISO14001:2015 (Certificate No. EMS602885).

The EMS continues to be maintained and is externally audited (by BSi) whilst delivering all indicative Best Available Technique (BAT) requirements for an effective management system. The current management systems will be updated to include the proposed activities.

WEPA UK Ltd also operates a certified management systems to:

- ISO14001:2015 Environmental management systems
- ISO 45001:2018 Occupational health and safety management systems
- ISO9001:2015 Quality management systems

These systems are applied to all areas within the permitted installation.

Waste Acceptance

Procedures have been established to ensure that the company only accepts appropriate waste at the facility in-line with the agreed waste categories (as outlined within the environmental permit).

If it appears that the waste does not comply with the description on the waste transfer note, or that it may be hazardous or otherwise not acceptable under the sites permit, then the waste will either be re-loaded and rejected (if the person delivering the waste remains on site), or it will be isolated from the rest of the waste in a quarantine area for removal as soon as possible.

Unplanned and Emergency Events

As part of the variation WEPA has amended existing and developed new management plans, in-line with NRW requirements to cover aspects such as Fire Prevention Management, Emergency Response and Noise and Vibration.

Point Source Emissions

The proposed change from CHP to steam boilers will remove existing emission points A1, A2, A6 and A7.

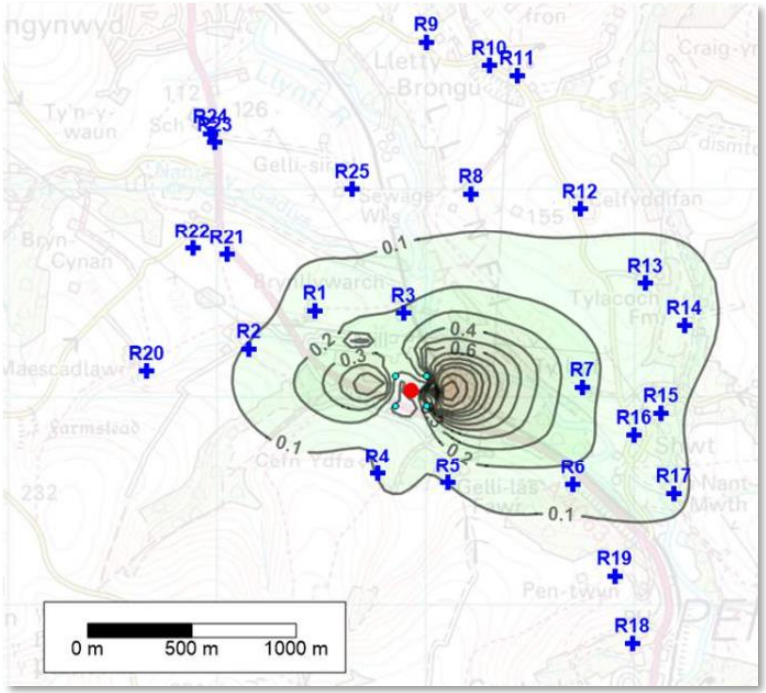
Two new emission points A14 and A15 will be created for the new boiler house. The emission points will be located within a single 30-metre-high wind shield (surrounding structure).

The two proposed boilers will be fuelled by natural gas, and therefore, the only atmospheric pollutants of concern are the oxide of nitrogen (NOx) with emissions to the atmosphere via a single twin flue 30 m high stack.

The ADMS 6.0 dispersion model has been used to predict ground-level concentrations of the oxide of nitrogen (NOx) and nitrogen dioxide (NO_2) released into the atmosphere from the proposed new boilers.

The principal conclusion of this assessment is that emissions to the atmosphere at their emission limits from the proposed two new boilers give rise to predicted ground-level pollutant concentrations (process contributions, PC) that are not of concern to human health or ecosystems.

The impacts are predicted to be insignificant.



S07 Emissions to Water

Surface Water

The permitted installation currently has one point source discharge to surface water (W1 – River Llynfi) via the on-site effluent treatment plant (ETP). The switch from the current CHP plant to the gas-fired boilers will not change or alter the characteristics of the effluent discharged to and treated within the ETP. No changes to the current emission limits and/or monitoring requirements is required. There are no new point source emissions to surface water from the installation.

A full re-assessment of the discharges from W1 demonstrate that Environmental Quality Standards (EQSs) are not at risk and the release concentrations are unlikely to cause pollution and require no additional control.

Sewer

There are no point source discharges to sewer associated with the installation or associated with this variation.

Groundwater

There are no point source emissions to groundwater associated with the installation or associated with this variation.

Fugitive Discharges to Ground

There are no discharges to groundwater (via infiltration) associated with the installation or associated with this variation.

S08 Noise and Vibration

Introduction

A noise impact assessment has been undertaken in-line with the British Standard BS 4142:2014+A1:2019 Methods for Rating and Assessing Industrial and Commercial Sound.

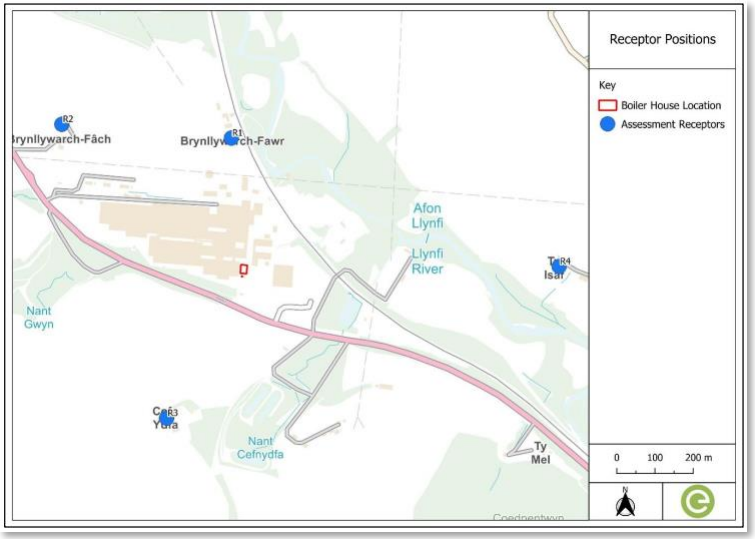
Noise Modelling

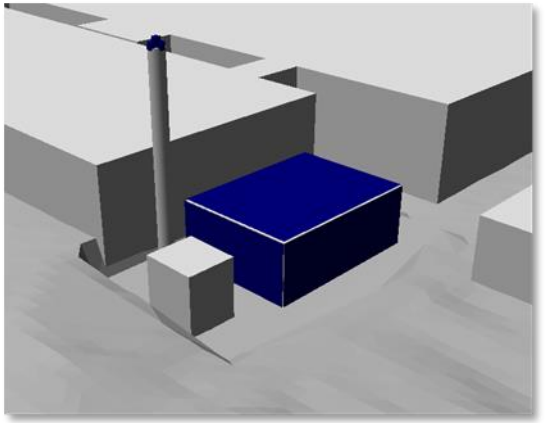
Noise emission levels from the Proposed Development have been calculated using predictive computer noise modelling. The noise modelling software (Cadna-A) uses algorithms based on ISO 9613 ‘Attenuation of sound during outdoor propagation’ to predict noise levels generated at receiver locations by noise sources.

BAT Assessment

The assessment indicates that the proposed plant items will not introduce additional impacts over the existing on-site activities. Accordingly, the measures applied to the proposed items are appropriate and BAT requirements are met.

The impacts are predicted to be insignificant.





S09 Summary

Introduction

The WEPA Group is a future-oriented family business operating throughout Europe, offering sustainable and innovative hygiene solutions. We provide trustworthy hygiene solutions and a sense of safety, contributing to the well-being of millions of people each day. WEPA is one of the three largest European hygiene paper manufacturers and lead the market in the production of hygiene paper from recycled fibres.

WEPA's business activities are based on a foundation of responsible conduct as an employer, social commitment, compliance and product safety. The four other fields of action:

- **future fibres** – aim for a fibre portfolio with leading environmental performance based on circularity.
- **operational efficiency** – aim for a carbon-neutral, zero-waste production and a sustainable water footprint.
- **sustainable hygiene product** – aspire to offer the most sustainable hygiene paper portfolio to make our customers successful.
- **portfolio and its extension through innovation build on this foundation** – expanding our existing product portfolio to be the leader in sustainable hygiene solutions in Europe.

The UN Sustainable Development Goals (SDGs) provide an important framework for WEPA's sustainable actions and offer guidance in the implementation of the Sustainability Strategy.

Conclusions

The proposed installation of the new gas-fired boilers will enable the facility to both remain globally competitive (through the British Industry Supercharger) and to install new, BAT-compliant gas-fired boilers that that meet current emission standards.

In addition, the design of the installation and associated equipment should also permit (when market conditions allow) a switch to hydrogen as a fuel source.

The Environment Agency has stated that hydrogen is a fuel that may be widely used in the future for the decarbonisation of industry as the UK moves towards its Net Zero goals (1). The impact is further reduced when green hydrogen (produced using electricity from renewable energy sources) is utilised.

The plant and associated infrastructure has been specifically designed to meet all current NRW BAT Standards.

(1) https://www.gov.uk/government/news/environment-agency-publishes-guidance-on-production-of-green-hydrogen

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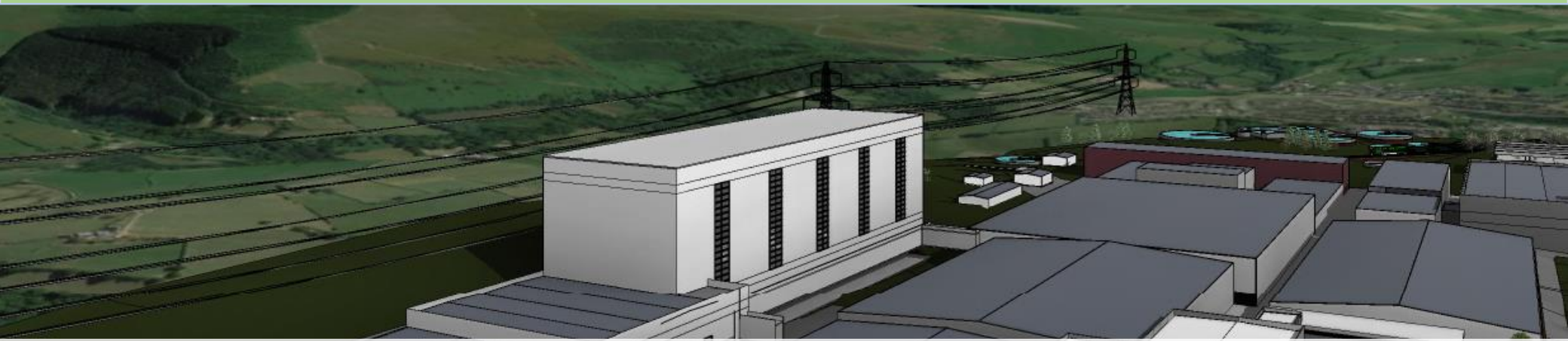

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