



Castle Environmental

Waste Recycling & Treatment Centre

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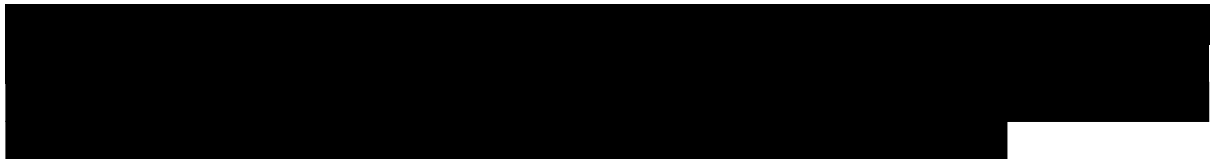
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Estimated changes to Power consumption – Minor Technical Variation **LP3439HM/V005**

Document Ref: LP3439HM/V005/PWR

The proposed change to the operating technique to introduce the use of carbon dioxide as a raw material in order to act as a neutralising agent for APCr and to provide a permanent mineralization solution for carbon dioxide has a minimal impact to the overall powder consumed by the site as the majority of the infrastructure is already in place and in operation.



Data on the normal power consumption and the estimated full time equivalent are provided below.

1. [REDACTED] - 37kW , operational for approximately 50% of the batch time. So 18.5kW full time equivalent
2. [REDACTED] - 80kW only required [REDACTED] 50% batch time and only in winter - So 20kW full time equivalent
3. [REDACTED] - 60kW only maintaining temperature so unlikely to be at full load, assume 50% on average.

It is therefore estimated that the proposal to utilize CO₂ within the process results in an additional power requirement of 68.5kW. This is considered a modest increase in the power consumed by the site.

Equipment will be subject to Planned Preventative Maintenance activities and will be managed in accordance with the company Energy Efficiency Policy in order to ensure its ongoing efficient operation.