

## Biotage Emissions Report, 2022

**Form Air1:** monitoring of processes A3 and A4 was last conducted in 2019 and an H1 assessment was carried out using the new data. Process A3 was a concern as emissions were above the short – term AQS limit. We have had some detailed modelling of this process carried out and this has been shared with NRW along with a plan to install suitable abatement when possible. Further emissions testing is planned for 2023 having been delayed by COVID restrictions on site and ongoing refurbishment of the labs.

**Form Perf1:** some recovery from the COVID pandemic has been seen in 2022, with both consumption of raw materials and output increasing as demand increased. Output increased by 30% for the products covered by the permit and other areas of the business also saw an increase. Efforts to reduce solvent consumption per tonne of product have seen a 4% decrease in consumption and work will continue in this area in 2023

**Water & Energy Use:** Water consumption has decreased slightly, -2%, this year, as we have moved to chiller circulators in the lab instead of water. The improvement here has led to a 30% decrease in the volume of water used per tonne of output. We are aiming to reduce water usage further by using more circulators for cooling, but most of these are now in place. Electricity consumption has fallen by 40% due to relocation of another department that was a relatively high energy user, and gas usage is down by 25% for the same reason. (NB The figure for gas consumption in 2021 has been found to be incorrect, and reported usage was ten times higher than actual use.) Overall, energy consumption has fallen by 40% and this, along with increased output has led to a 56% reduction in MWh per tonne of product.

Hazardous waste declined in 2022 by 1%; despite the increase in output, as there have been less re – worked batches in 2022. Non-hazardous waste is down by 30%, and mixed recycling is down by 5% for the site and this reflects increased re–use of packaging in non – chemical areas of the business. Several projects will continue in 2023 across the business aimed at reducing all types of waste while increasing the proportion of mixed recycling.

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