

ELMHURST PRIMARY SCHOOL

Reducing chemicals and simplifying cleaning through on-site generated solutions

OVERVIEW

Juniper Bright trialled the Tersano Lotus Pro system at Elmhurst Primary School, part of New Vision Trust, to explore how on-site generated cleaning solutions could reduce chemical use, improve sustainability and simplify day-to-day cleaning operations.

Elmhurst is a large primary school in Newham, with close to 1,000 pupils and a busy, high-traffic environment. The aim was to test whether a single, biodegradable cleaning solution could replace multiple traditional chemicals without compromising standards.



CASE STUDY

Elmhurst Primary

THE CHALLENGE

The existing cleaning approach relied on multiple products, including sanitiser, washroom cleaner, glass cleaner and descalers, many of which required dilution and decanting.

Across a team of 11 staff, this resulted in over 30 spray bottles in use across the site, alongside regular monthly deliveries of cleaning chemicals.

This created complexity in training, storage and stock management, as well as ongoing cost and environmental impact linked to packaging and deliveries.

THE APPROACH

Juniper worked in partnership with the school and trust to install a Tersano Lotus Pro unit within a designated cleaning cupboard, using an existing water and power supply.

The system converts water into stabilised aqueous ozone, a biodegradable cleaning solution that can be used across a wide range of surfaces.

The trial was initially focused within the nursery, a high-traffic area requiring daily cleaning, allowing performance to be tested in a demanding environment while minimising disruption across the wider site.

WHAT CHANGED

The introduction of the system replaced multiple cleaning products with a single on-site generated solution for general cleaning tasks.

This reduced the need for dilution, decanting and handling of different chemicals, simplifying processes for the cleaning team.

It also reduced the requirement for storage space and streamlined stock control, as the solution is produced on demand.

Before the trial, the site relied on five routine cleaning products and more than 30 spray bottles across the school.

AT LEAST
55% REDUCTION
IN ROUTINE CHEMICAL SPEND
= MONTHLY SAVINGS OF +£230



The on-site system can also replace around 30 litres of purchased product per month, reducing packaging waste and delivery demand.

THE IMPACT

The trial demonstrated that stabilised aqueous ozone could be used effectively across a wide range of surfaces, including walls, skirting, furniture and general touchpoints.

Cleaning teams responded positively to the simplicity of using a single product for most tasks, reducing complexity in day-to-day operations.

No hygiene related complaints were reported during the trial period within the nursery.

The system also supported a reduction in environmental impact by removing the need for multiple chemical products, reducing packaging and limiting deliveries to site.



The new system replaced most day-to-day products with one multi-purpose solution, reducing handling, storage and stock complexity.

CASE STUDY

Elmhurst Primary

PEOPLE IMPACT

The simplified approach reduced the need for extensive product training and supported a more straightforward cleaning process for staff.

Feedback from the team was positive, particularly around the ease of use and the idea of reducing the number of chemicals handled on a daily basis.

“This makes everything so much easier, no dilution rate, one chemical.”
Lucy Fryer - Cleaning Supervisor



OPERATIONAL CONSIDERATIONS

The trial also highlighted that while the solution performed well across most surfaces, higher strength chemicals were still required for specific tasks, such as heavily soiled non-slip flooring in high-traffic areas.

This reinforced the importance of using the system as part of a balanced cleaning approach rather than a full replacement in all scenarios.

ENVIRONMENTAL IMPACT

The system produces a bio degradable cleaning solution on-site, reducing reliance on manufactured chemicals, plastic packaging and associated deliveries.

This supports a lower carbon approach to cleaning operations and aligns with wider sustainability goals across the trust.

By generating solution on site, the trial reduced the need for bottled chemicals, packaging and regular deliveries, while leaving no harmful residue in wastewater systems.

CLIENT FEEDBACK

The school responded positively to the trial, particularly in relation to sustainability and innovation.

The headteacher welcomed the opportunity to reduce environmental impact, as well as noting that the residue-free solution “makes it a safer choice for the children”.

KEY LEARNING

The trial confirmed that on-site generated cleaning solutions can significantly reduce chemical use and simplify cleaning processes, particularly in high-traffic environments.

It also highlighted the importance of retaining targeted products for specific cleaning challenges, ensuring standards are maintained across all areas.

CONCLUSION

The Elmhurst trial demonstrates how innovation can be applied in a practical way to reduce chemical use, simplify operations and support more sustainable cleaning practices.

By working closely with the client and testing the approach in a live environment, Juniper has identified a scalable solution that can deliver both environmental and operational benefits.

