

Hydro-X

working in partnership with

Sainsbury's

**“Progression towards scientific
compliance and sustainability in
air and water”**



Aims of the Project

- 1) To be fully compliant to all legislation regarding air and water.
- 2) To reduce and reuse the water and energy use of Sainsbury's Regional Distribution Centres network.
- 3) To have consistent standards and programs across the whole of the property portfolio.
- 4) To have effective communication with and management of staff and contractors to deliver the above.



Baseline in October 2009

- 1) Issues with cataloguing assets
- 2) 'Domestic' water monitoring program not being conducted on every site



- 3) Dirty domestic water tanks
- 4) Problems with some sites with LEV (Local Exhaust Ventilation) were not carrying out and recording COSHH assessments correctly
- 5) Remedial action outstanding on all sites
- 6) No central method of recording domestic and cooling tower monitoring on sites

Program of Works Instituted

1. Carried out a full Legionella risk assessment to ACOP L8 specifications allowing us to identify Legionella risk and minimise the potential of exposure to Legionella Pneumophila throughout the Distribution Centre Network.
2. The implementation of an electronic log book:
 - The system required no specialist software and can be accessed from anywhere with an internet connection. The log books of all properties in the Distribution Centre portfolio can be accessed from any location
 - Implemented an automated monitoring scheme which is fully compliant with ACOP L8
 - All historical monitoring is stored in the system and can be accessed from anywhere with an internet connection
 - An escalating alert system ensuring continual control of systems through email alerts was implemented
3. Implemented a Non-Conformance Register (NCR) to ensure any alerts and out of spec items that are monitored are actioned appropriately.
 - As an example: If domestic hot water temperatures are out of specification a 'non-conformance' will be raised that will be actioned and closed when works have been put in place to remedy the issue. The non-conformance will remain open until the problem has been resolved.
4. Ensured that independent auditor's reports were actioned: previously there were instances of reports being ignored and remedial works were often re-occurring.
5. Chemical handling by site staff has been minimised: reducing the risk to the on-site engineers.
6. Improvement in communication
 - New electronic alert system ensures action is taken and recorded.
 - Improvement in communications by creating one point of communication for Facilities Managers.



On-going Sustainability Projects

Tray wash – cool wash project.

Offering advice and consultancy on 'Project Persil' with the aim of reducing the carbon footprint and proposed savings of circa £750,000.



Effluent testing

- Ensuring discharge consents are met by the sites
- Ensuring Sainsburys meet their environmental targets for discharge

Borehole assessment

Investigating the potential for using borehole water to sustain the water needs of sites, reducing the cost of water to site.

Bio diesel testing

Ensuring bio diesel tanks meet IP385 standards.

Water re-use from tower blow-down

- Investigating the re-use of waste streams from cooling tower bleed off with the aim of saving 25% of water used by the systems.
- Advising on Enhanced capital allowance government schemes.

Other

- Ensuring cooling towers cycle 4 times: previously towers were set to cycle 2 – 3 times. Aiming to save more water through the use of cooling towers
- Advising on waste water abatement schemes, reducing sewerage costs for waste water.

As of February 2017...



J Sainsbury distribution is standing at 100% service and compliance on Cooling towers, Domestic water and Air Hygiene monitoring, carried out by Hydro-X Water Treatment using a consistent programme of works across the logistics Distribution Centre network.

All assets across the network of distribution centres are catalogued on an easily accessible electronic log book.

Any alerts raised from non-conformances are escalated until a solution is found and any associated remedial works are fully discussed with site contacts and carried out as soon as practicable.

On an on-going basis, Hydro-X is working in partnership with Sainsbury's to progress various sustainability projects aiming to:

- a) reduce costs
- b) reduce energy and water usage
- c) reduce the carbon footprint of the Distribution Centres and associated buildings
- d) ensure the highest levels of savings are achieved without compromising quality and service.