

## INCIDENT TYPE:

## NEAR MISS – WHILST MAINTAINING A WASTE WATER AERATION BLOWER UNIT

### What happened

An Incident occurred when a SW employee tried to isolate an aeration blower unit on an SWS project, only for the equipment to start unexpectedly just before they commenced work. An investigation is underway and the initial findings are as follows -

The blower control panel has a ventilation fan as well as the main blower. They can both be isolated at the main panel but in addition to this there is a local isolation switch labelled "Blower 001". The operative used this local switch for isolation but it actually only isolated the ventilation fan. The main fan was still live but with no warning to this effect.

(The wiring drawings in the O&M manuals did not show this local isolator).

The unit concerned was part of a Naston MBR Membrane Biological Reactor.

### Preventing a re-occurrence

As part of the investigation SWS require the following actions to take place –

Please check whether any such units are installed or being designed into any of your projects.

Where such equipment is installed the following issues must be considered:

1. What method of isolation has been designed? (The emergency stop is not considered a method of isolation)
2. Where there is more than one method of isolation, have all the circuits and electrical equipment been covered by both types of isolation?
3. Are the isolation switches correctly labelled?
4. If the plant has been commissioned have these systems been tested prior to certification and handover?
5. Do the as-built drawings accurately record the actual electrical installation?

***If you have one of these units as part of your project or if you know of any existing units or you need further information please consult Neal Dudley who is co-ordinating the investigation (07894 003318).***

### What has this incident highlighted



*The main isolator*

1. This equipment is package plant but is not part of any framework agreement and its isolation provision must be checked.
2. Isolation techniques should match requirements of The Electricity at Work Act 1989 and SW Specifications.

### Local isolator

