Safe Work Instruction - Cleaning Sodium Hypochlorite Injectors

DO NOT use this plant* unless you have been inducted in its safe use and operation by an Authorised Experienced Operator

This SWI may not cover all possible hazards and risks and should be referred to as a control measure in the risk assessment process. Additional training may be required for high risk plant. Site and task may change required PPE.

PERSONAL PROTECTIVE EQUIPMENT

- Eye protection must be worn
- Long and loose hair must be contained or covered.
- Protective body clothing must be worn
- Foot protection must be worn
- Hand protection must be worn
- Half face mask respiratory protection must be worn
- Face protection must be worn

POTENTIAL HAZARDS AND RISKS

Slip, Trips, Falls
Slip, trip, fall due to uneven or slippery work surfaces

Manual Task Injury
Manual task injury from incorrect manual handling techniques

Other
Exposure to hazardous chemicals
Exposure to toxic fumes
Burn injury
Injury due to operating of plant in unsuitable weather conditions
Injury due to reaction with other chemicals

Explosion
Explosion of gases, vapours or liquids

Exposure to High Pressure Fluid
Injury from exposure to high pressure fluids

PRE-OPERATIONAL SAFETY CHECKS

- ✓ Complete site specific risk assessment
- ✓ Complete the appropriate pre-operational plant checklist
- ✓ Ensure you are familiar with plant operations and controls
- ✓ Ensure that guards are fitted, secured and functional in accordance with manufacturers guidelines

OPERATING PROCEDURES

- ✓ Operate plant to the conditions of the work area
- ✓ Locate injector point below last valve handle on pool return pipe. Signage should indicate where the injector is
- ✓ Turn chlorine ducolometer (Hypo pump) off
- ✓ Turn power off before beginning any activities
- ✓ Bleed the line to relieve pressure. Not relieving the pressure could lead to explosive release of sodium hypochlorite
- ✓ Unscrew feed line from injector and remove
- ✓ Turn off injector isolating valve, unscrew injector and remove
- ✓ Inspect injector for calcification/blockage
- ✓ Disassemble injector and clean with water to remove calcification
- ✓ Check injector isolating valve is not blocked and clean if necessary
- ✓ Apply new plumbing tape to injector thread and screw back into ball valve
- ✓ Replace feed line, making sure O-rings are in place and in good condition. The unit will leak if O-rings are removed or damaged
- ✓ Turn injector valve on – note, the injector valve must be turned on before the pump is started or the feed line could blow out and eject sodium hypochlorite at pressure

ENDING OPERATIONS

- ✓ Turn power on
- ✓ Turn chlorine ducolometer (Hydro pump) on

Note: if the isolating valve requires maintenance, it is recommended that the pool system be shut down. The following steps are taken to shut the pool down and reversed to start up again. After the injector valve has been turned off:

- Turn filter valve off
- Turn pump return handle to off
- Turn main pump switch to off

FIRST AID – immediate medical attention will be required

EYES

If this product comes in contact with eyes:

- Immediately hold eyelids apart and flush the eye continuously with running water
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving eyelids by occasionally lifting the upper and lower lids
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor for at least 15 minutes
- Transport to hospital or doctor without delay
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel

SKIN
If skin or hair contact occurs:

- Immediately flush body and clothes with large amounts of water, using safety shower if applicable
- Quickly remove all contaminated clothing, including footwear
- Wash skin and hair with running water. Continue flushing with water until advised to stop by Poisons Information Centre

INHALED

- If fumes or combustion products are inhaled remove from contaminated area
- Lay patient down. Keep warm and rested
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary
- Transport to hospital or doctor without delay

DO NOT

- ✘ Do not use if plant is faulty. Attach a DO NOT OPERATE tag and report fault to your supervisor
- ✘ Do not leave plant running unattended
- ✘ Do not add water to material as this will cause a violent reaction, always add material to water
- ✘ Do not let Sodium Hypochlorite come in contact with any acids, solvents, combustible materials, greases and woods
- ✘ Do not wear loose jewellery
- ✘ Do not use mobile phone while operating plant

***Plant in this SWI refers to any machinery, equipment, appliance, container, implement and tool.**