

PRODUCT BULLETIN

ISSUE/DATE:	May 3, 2012	BULLETIN NUMBER:	AQ050312
SUBJECT:	Operation & Maintenance	PRODUCT LINE:	All Aquafine UV Systems
TOPIC:	CRITICAL SAFE EQUIPMENT OPERATION & MAINTENANCE REMINDER		

OVERVIEW / DESCRIPTION

In October 2011, a piece of glass was forcibly ejected from an Aquafine Model SCD-H 1750 UV unit, resulting in a fatal injury to the employee of an Aquafine end user. While the investigation into all circumstances leading to this fatality continues, the tragedy serves to remind us all of the critical importance of adhering to all safety-related precautions associated with such products.

Aquafine products are safe when properly maintained and operated, but, if any of the required precautions, including without limitation the following examples, are not followed, seriously dangerous conditions may result, in turn leading to the risk of **severe bodily injury, or death**.

EXAMPLE PRECAUTIONS

Aquafine would like to again remind everyone of certain key operational and maintenance procedures to ensure proper equipment operation and the safety of those working on or near the equipment.

- **Equipment should always be operated in accordance with the operation manual.**



- **The equipment should never be serviced unless the electrical power has been shut down, locked out and**

tagged out, subject to limited exceptions set out in the operation manual and when the work is being performed by an electrician or other qualified person. Failure to follow this directive can result in electrical shock, severe bodily injury and/or death from electrocution.



- **The socket cover should never be removed while the unit is pressurized.** The socket cover is designed to protect the operator from any glass, water or other material that may be ejected from the unit in the event of a catastrophic failure of a compression nut. Especially if a unit has been operated without following all applicable maintenance procedures, including timely replacement of wear components such as lamps and CPVC compression nuts, removal of the end cover while the unit is pressurized may permit the forcible ejection of a lamp, sleeve, or pieces thereof, potentially resulting in the serious bodily injury to, or death of the operator or others. Isolating and depressurizing the unit, by closing the inlet and outlet valves and carefully and slowly opening the drain, air bleed or equivalent valve, **before** removing the socket cover, eliminates the risk.

PRODUCT BULLETIN - CRITICAL SAFE EQUIPMENT OPERATION & MAINTENANCE REMINDER



- **Ensure all covers are fully installed and latched or bolted (as applicable) properly BEFORE the unit is pressurized.**
- **Never tamper with or disable the safety-related features such as temperature sensors, counters and the socket covers.**
- **Never operate the unit at temperatures or pressures in excess of the operating limits specified in the operation manual.**
- **Use only the nut tightening tool provided with the unit to tighten compression nuts.** Other tools can damage the compression nuts and, if the other safety precautions are also not followed, lead to catastrophic compression nut failure, and possibly serious injury or death caused by material forcibly ejected from the unit while under pressure.
- **Follow all recommended replacement intervals.** We have a network of fully trained, authorized service providers and parts distributors who are in a position to advise on the proper intervals and supply replacement parts. **The maximum required replacement interval for CPVC compression nuts is three (3) years.**
- **Perform Inspections.** Whenever a compression nut is removed for any reason, it should be visually inspected for internal or external discoloration, cracks or other signs of wear. In addition, whenever the unit has been isolated and depressurize by closing the inlet and

outlet valves and carefully and slowly opening the drain, air bleed or equivalent valve, and the socket cover removed, visually inspect all of the compression nuts for cracks or other signs of wear. **Any compression nuts displaying visible damage must be replaced before the socket cover is attached, and the unit is re-pressurized and placed back into service.** The equipment should never be operated when visibly damaged compression nuts are installed.

- **Do not operate lamps beyond their specified useful life.** Over-aged lamps can fail to ignite properly, overheat and damage the compression nuts, possibly leading to compression nut failure and, if the other safety precautions are also not followed, forcible ejection of a lamp, sleeve, or pieces thereof, and possible serious bodily injury to, or death of the operator or others.
- **Avoid UV exposure.** Always observe the precautions set forth in the operation manual regarding the use of personal protective equipment such as eye shields, and not looking at energized UV lamps. Failure to do so could result in serious and possibly permanent eye injury.
- In many installations, the Aquafine unit is a component of a larger integrated system. Be aware of any changes made to your systems, such as adding or removing system components-- these may alter performance conditions.

The above list is not exhaustive. Always follow the precautions in the operation manual and any applicable product bulletins or other updates, and standard operating and safety procedures for pressure vessels of this type.

ASSISTANCE

If you require technical assistance, have questions or comments; please contact your Authorized Aquafine Distributor.

For contacting Aquafine directly, you can reach our Customer Care Representatives or Technical Support Department at:

www.sales@aquafineuv.com

www.techsupport@aquafineuv.com