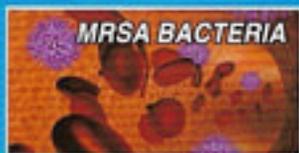


# WHAT'S IN YOUR WATER?



KLEBSI BACTERIA



MRSA BACTERIA



EBOLA VIRUS

## SALCOR UV FOR SAFE WATER NOW!

HELPS END DEADLY "SUPERBUG" CRISES

SAVES HEALTH & PRISTINE ENVIRONMENTS

SURVIVES MOST WEATHER "CATASTROPHES"

ENABLES REUSE OF DISINFECTED EFFLUENT

### UL & cUL LISTED



30-Day Underwater Proven  
"FLOOD-PROOF" (NEMA 6P)

### SURVIVES MOST



Hurricanes, Floods  
& Electrical Storms



SINCE  
1997



SALCOR "3G" UV UNIT  
9,000 GPD GRAVITY FLOW

### MODULAR BLOCK DESIGN



12 UNIT UV ARRAY  
"3G'S" IN PARALLEL/SERIES  
ARRAYS TO 100,000+ GPD



DUKE'S OCEANFRONT RESTAURANT, Malibu, CA  
4 UV Unit Array Effluent Discharges into Ocean Beach Sand

### ELEMENTARY SCHOOL, MO



3 Salcor 3G UV  
Units (Parallel Array)  
in Extended Aeration

### NURSING HOME, OH



2 UV Unit Array Replaced  
Chlorine Chamber

- Residential/Commercial Wastewater Onsite Decentralized Uses from 9,000-100,000+ GPD
- Modular System - **Less Costly** Install & Reliable Tested Performance
- Expanded Arrays Reduce Spare Parts Inventory & Increase Flow
- Originator of "Revolutionary" Teflon® Foul-Resistant Lamp Barrier
- Most 3rd Party Successfully Tested (since 1997):  
UL Listed; NSF/WA State Fecal Coliform Tests, 6-Mo Each with 21 ATU's; Tested and approved in BNQ Quebec, Canada; University Studies - Ohio State U, U of Washington, UC Davis, & U of Rhode Island
- Low Cost <40 Watts & Easy Electrician Install (In Ground or Pump Tank) & Professional O&M
- **No Chemicals Added** and Enables **Water Recovery/Reuse**
- Reliable LED Visual Monitoring & Available Alarm Contacts
- 2-Year Warranty, Unit & "Long-Life" Lamp

## ▶ "3G" UV DISINFECTION, TRUSTED WORLD LEADER FOR 20+ YEARS

**SUCCESSFULLY TREATS:** Single & Cluster Homes, Small Sewage Plants, Schools, Hospitals/Nursing Homes, Churches, Restaurants, Mobile Home Parks, Campgrounds, Nurseries/Cut Flowers, Houseboats, Food Processing Wastewater, Etc.



Made in  
the USA

# SALCOR

UV DISINFECTION SINCE 1978

www.Salcor.World  
jscraver@aol.com

760.731.0745 F: 760.731.2405

**DESCRIPTION**

The SALCOR 3G unit disinfection chamber is coupled directly to the aerobic plant discharge pipe, and may be permanently installed below grade. One ultraviolet lamp is mounted in a sub-assembly, which is easily inserted or removed through the top of the riser pipe, for periodic servicing.

The disinfection subassembly causes the wastewater entering one side of the unit to flow vertically downward, make a 180 degree turn, and then flow vertically upward and out the other side of the unit. This well-defined flow path is designed to give the fluid proper exposure time under turbulent flow. *No short circuiting.*

The ultraviolet lamp is surrounded by a clear fused quartz tube to control the lamp surface temperature. A clear Teflon® film covers the quartz tube to minimize surface fouling. When the disinfection chamber is filled with water, the ultraviolet lamp can operate continuously, whether or not water is flowing.

The 3G unit may be installed in a pump tank, or in the ground. *See Installation Manual for details.*

Properly installed, the 3G unit, rated NEMA 6P, (Floodproof), can operate during short term submergence. *It passed a 30-day Underwriters Laboratories underwater test, and is UL & CSA certified, (listed) under UL Standard 979.*

The electrical subassembly is mounted in a junction box atop the 4-inch riser pipe. A printed circuit board contains fuses, alarm circuitry, UV lamp ballast, power cable connections, voltage surge protection, and electronic noise filters.

The board is mounted underside the junction box lid. This simplifies installation, O & M, & mitigates humidity effects in the junction box.

The 3G alarm relay circuit triggers an external alarm to warn the user the UV lamp is not operating properly. Electronic components in the circuit sense changes in lamp operation which correlate with the germicidal ultraviolet output.

When the UV lamp is producing ultraviolet germicidal light at a safe level, a green LED indicator light, located atop of the electrical junction box, glows, which indicates proper UV lamp operation. The light stops glowing when the UV lamp light output falls below a safe level, or is not operating.

**DESIGN PARAMETERS**

- **Maximum flow rate:** 3 GPM for 30:30 effluent; 6 GPM for 10:10 effluent.
- **Fecal coliform reduction** at lamp end-of-life (2 years) greater than 99.9 %.
- **Inlet and outlet pipe** is 4-inch schedule 40 ABS.
- **Pressure drop** is less than 0.5 inches of water at maximum flow rate.
- **Power use** is 40 Watts. **Energy use** is 0.72 kW-hr/day, assuming continuous operation.

- **UV lamp** is low pressure mercury, 90 % of output at 253.7 nanometers. **Minimum arc length** is 30 inches, and the UV intensity is greater than 190 microwatts/cm<sup>2</sup> at one meter. **The unit and “Long Life” lamp** are warranted 2 years.
- **UV dose** is greater than 55 mj/cm<sup>2</sup> (55,000 microwatt-seconds/cm<sup>2</sup>).
- **UV Lamp Ballast** is 90 % efficient, high frequency operation (50 kHz), with thermal link protection. **Input Voltage** is 120 or 240 VAC at 50 or 60 Hz. **Input current** is less than 0.5 Amps.

**TWENTY-ONE ATU/3G 6-MO. TESTS**

*Since 1997, Manufacturers of 21 Treatment Units Have Partnered with the Salcor 3G UV Unit. Each Used the NSF Standard 40 and the Washington State Fecal Coliform Reduction Protocol for 26 weeks. SALCOR'S 3G UV Effluent Fecal Coliform Count Ranged From 2 to 35 per 100 ml. (Geometric Mean).*

- Aero-Tech
- AK Industries, Hydro Action
- ANUA (Bord na Mona)
- Aqua Klear
- Bio Microbics, Microfast 0.5
- Clearstream
- Consolidated Treatment, Enviroguard .75
- Consolidated Treatment, Multiflo
- Consolidated Treatment, Nyadic
- Delta Whitewater, DF 60
- Delta Whitewater, Ecopod
- Ecological Tanks, Aqua Safe
- Enviro Flo
- Fuji Clean USA
- Hoot Aerobics
- Jet Inc.
- Lowridge Onsite Technologies
- Norweco – Singulair
- Orenco, AX 20N
- Quanics, ATS-CSAT-8-AC-C500
- Solar Air

**Residential, Commercial, Municipal Applications**



**CASCADE HIGH SCHOOL**  
4 Salcor 3G UV Units in a Parallel/Series Array  
Oregon - 2003



**UV Units (inside)**  
Lifewater Engineering  
Portable Unit  
Alaska - 2010