

# No Blowdown – No Chemical Feed

**HAZARDOUS CHEMICALS**

## Cooling Tower Treatment

**WCTI Patented Technology for Cooling Tower Treatment and Water Conservation**  
**ZERO Blowdown Silica based Technology**

- High Efficiency (HES) removal of hardness minerals will eliminate scale risk
- Natural minerals in the water are used to eliminate corrosion and biological growth
- Cooling Tower Blowdown is reduced from 20-40% to less than 2%

Water Conservation Technology International  
 Bringing “Green” Innovation to your Facilities

### LEED (gain up to 5 points)

- WE 2.0 - Innovative Wastewater Technologies (1)
- WE 3.1 - Water Use Reduction – 10% (1)
- WE 3.2 - Water Use Reduction – 20% (1)
- WE 4.1 – Chemical use reduction (1)
- WE 4.2 – Non Potable Use (1)

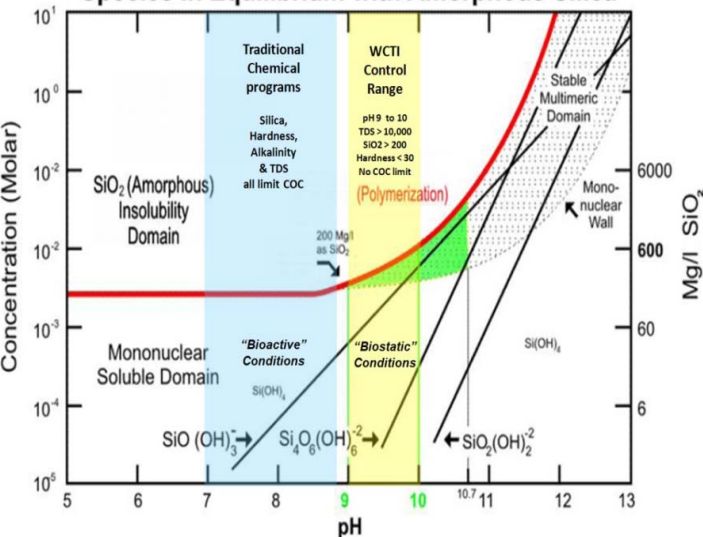
### LOW CARBON FOOTPRINT

- ✓ Minimize heat transfer loss
- ✓ Avoid high energy consuming devices
- ✓ Eliminate manufactured chemicals

### LEAN /OEE

- ❖ Minimize water use and disposal costs
- ❖ Reduce capital expense / investment
- ❖ Reduce variables for work flow improvement
- ❖ Reduce operator time and safety risks
- ❖ Optimize energy use (heat transfer) cost
- ❖ Reduce equipment cleaning and replacement
- ❖ Reduce chemical handling and storage
- ❖ OEE - Optimize Equipment Efficiency

Species In Equilibrium with Amorphous Silica



### Water Savings with WCTI

System Design Information	Current	Proposed
Cooling - Design Capacity Tons	1500	1500
Cooling - Peak Load Tons	1200	1200
Cooling - Average Load Tons*	1,000	1,000
Average Load Evaporative GPM	25.0	25.0
Cycles of Concentration	2.5	50
Blowdown GPM	16.0	0.5
Make-Up GPM	40.0	24.5
Avg Raw Total Hardness, mg/L CaCO3	200	0.5
Cost of Make-up per 1,000 Gals.		\$ 2.00
Cost of Blowdown per 1,000 Gals.		\$ 1.00
Current Annual Water Use	Gallons	21,024,000
Proposed Annual (Reduced) Water Use	Gallons	12,871,837
<b>Annual Blowdown Water Saved</b>	<b>Gallons</b>	<b>8,152,163</b>
Water Savings (before Regenerate cost)	\$/Year	\$ 24,066.46

More information – Contact [www.water-cti.com](http://www.water-cti.com)