

CRITICAL WATER AND DIALYSATE REQUIREMENTS

❖ **Water (product) chemical quality**

- Within maximum allowable levels per AAMI:RD 52 Table 1 (V177)
- Tested at least annually and as indicated (V201)

❖ **Water (product) microbiological quality**

- Maximum 200CFU/2EU; Action levels 50CFU/1EU (V178)
- Distribution system disinfected monthly (V219)
- Tested at least monthly from sites; actions taken if >action levels (V213)

❖ **Dialysate microbiological quality**

- Maximum 200CFU/2EU; Action levels 50CFU/1EU (V180)
- Tested monthly from at least 2 HD machines; each HD machine tested at least annually; sampling methods; actions taken if >action levels (V253)

❖ **Chlorine/chloramines removal (carbon)**

- 2 carbon tanks (or banks of tanks) with sample port between (V192)
- Sufficient carbon to remove chlorine/chloramines; total EBCT 10 min-verified by interview and/or record review (V195)

❖ **Chlorine testing**

- Water after first carbon tank(s) tested for total chlorine prior to each ICHD shift or approx. q 4 hours during the treatment day (V196)
- If total chlorine test >0.1mg/L, "breakthrough", immediate actions taken (V197)

❖ **Reverse Osmosis unit function and monitoring**

- Function monitored and recorded daily by % rejection & conductivity or TDS; audible & visible alarms (V199, 200)

❖ **Deionization system monitoring (if present or part of back-up plan)**

- Resistivity continuously monitored; audible & visible alarms in patient treatment areas; resistivity maintained >1.0 megohm/cm (V202, 203)
- Automatic divert-to-drain or automatic cut-off valve to prevent water flow to the HD machines (V203)
- DI followed by ultrafilter (V204)

❖ **Dialysate proportioning ratios match**

- Only matching dialysate proportioning ratios used on HD machine set at same ratio (V249)

❖ **Dialysate pH & conductivity testing at HD machine prior to treatment**

- Dialysate pH & conductivity tested at the HD machine with an independent method prior to each treatment per machine manufac. DFU (V250)

❖ **Staff training and monitoring**

- All staff who conduct water, dialysate testing and technical operations sufficiently trained; practices audited at least annually (V260)

Water System Flow Diagram

