The Ottawa Hospital | L'Hôpital d'Ottawa

NEPHROLOGY PROGRAM
DEPARTMENT POLICIES AND PROCEDURES

Hemodialysis - Section 14 - Unit Specific - BCC Neph 14-03
Responding to RO-DI Alarms
No.: 01491 (TOH Standardized Policy Number)

ISSUED BY:
Hemodialysis Clinical Practice Committee

DATE OF APPROVAL:
2015/06

APPROVED BY:
Program Clinical Director & Division Head

LAST REVIEW/REVISION DATE:
2017/11

CATEGORY:
Unit Specific Policies

IMPLEMENTATION DATE:
2015/06

POLICY STATEMENT:

- The water treatment system operates with the Reverse Osmosis Unit (RO) and two Deionizers (DI's) in series

- Alarms will be generated in the event the Reverse Osmosis Unit malfunctions or the (DI's) become exhausted. In such situations, you will need to reconfigure the system to ensure safe water is being supplied to the Hemodialysis equipment for treatments The Technical Department must be contacted for support prior to changing the water treatment system from its normal operating configuration. Biomedical Nephrology Technical Team can be reached at the Riverside Campus @ 613-738-8400 ext. 82832 or 82825 or the after-hours on-call Technologist @ 613-759-9229

BACKGROUND STATEMENTS:

- During abnormal circumstances, safe water can be delivered to the Hemodialysis equipment by using the Reverse Osmosis Unit or the DI's alone

PROCEDURE:

Section A: To use DI's cylinders when the Reverse Osmosis Unit shuts down or needs to be shut down

1. Press the OFF button on the front panel of the Reverse Osmosis Unit if not already off

2. Open valve 14, close valves13 and 15

3. If during treatments, you experience insufficient water alarms on the Hemodialysis equipment, verify the pressure at gauge “G”. If it is showing close to 0 psi, adjust the dialysate flow rates down on as many Hemodialysis machines as required to bring up the pressure back up to clear the “insufficient water” alarms. If flow rates are adjusted notify the Nephrologist of the change to the dialysate flows
4. Verify both DI alarm lights are green
5. Monitor DI lights on an hourly basis to ensure the lights are still green. If one of them turns red, notify the Technical Department immediately
6. Follow steps outlined in Section C

Section B: Using the Reverse Osmosis Unit on its own in the event that “BOTH” DI’s become exhausted as indicated by an alarm

1. Open valve 17
2. Close valves 16 and 18

Section C: Monitoring and responding to DI alarms

1. When DI’s are online, both alarm lights located on the top of the cylinders should be green indicating they are not exhausted
2. If one of them turns red, notify the Technical Department immediately
3. If the first DI alarms (light labeled “200”), remove the black “phone cord” from its alarm and plug it in to the second DI alarm on top of the cylinder. (This cord is used for the audible alarm at the nurses station)

4. If the second DI alarms (light labeled “1”). If RO Unit is operational follow Section B

5. If RO Unit is inoperative stop dialysis treatments immediately and notify the Technical Manager and Clinical Manager immediately. The Nephrologist will be informed by the Clinical Manager

DOCUMENTATION:

1. Report alarm conditions and pressures to TOH Biomedical Nephrology Technical Team

2. Document all water loop valve pressures on Reverse Osmosis Daily Log following any changes to the water treatment system configuration

RELATED POLICIES / LEGISLATION: N/A

REFERENCES:

1. Biomed Nephrology Technical Services

COMMENTS / SIGNIFICANT REVISIONS: N/A