



VETERANS ADMINISTRATION MARYLAND HEALTH CARE SYSTEM  
BALTIMORE DIVISION  
10 NORTH GREENE STREET  
BALTIMORE, MD 21201

GEN000015.2

**PATHOLOGY & LABORATORY MEDICINE SERVICE**

**Water Policy version 2**

**General Procedure # GEN00015**

**PURPOSE:**

Clinical Laboratory Reagent Water (CLRW) type 1 is low in ionic, organic and particulate matter contamination. It is required in some procedures such as a diluent for reconstitution of Chemistry and Microbiology materials, patient sample dilutions, staining of Histology slides some Blood Bank procedures. It is also used as a cleaning agent for some Chemistry and Microbiology instruments. CLRW will not degrade nucleic acids or interfere with enzymatic reactions. Requirements for CLRW are:

- Maximum microbial content is 10 CFU/mL
- Minimum Resistivity of 10 (in-line) megohm-cm
- Use of 0.2 um filter for removal of particulate matter
- Use of Activated Carbon for removal of organic material

**PROCEDURE:**

- A. The following quality checks are the responsibility of the laboratory sections utilizing the CLRW:
1. Daily:
    - a) Resistivity readings must be taken and recorded from each faucet delivering CLRW. (See individual section's Water Policy for step by step instructions)
    - b) Check to ensure orange light is steadily lit located on individual faucets or tanks. A blinking or an unlit light indicates the tank needs service (Contact Virginia Water Systems at phone 804-639-2500 – account ID#00002547).
  2. Weekly:
    - a) pH readings are recorded and within acceptable limits (5.0-7.0). pH readings outside of the acceptable limits require a service call to Virginia Water Systems (see contact information in 1(b) above).
  3. Monthly:
    - a) Water sample is cultured from each faucet delivering Type 1 water. Bacteria content should be less than 10 colonies per ml of water. Results of greater than 10 colonies per ml of water require a service call to Virginia Water Systems (see contact information in 1(b) above).



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- B. The following maintenance measures are the responsibility of Virginia Water Systems:
1. Quarterly:
    - a) Capsule Filter changes
  2. Change of tank and UV filters as scheduled by Engineering Services.
  3. As needed:
    - a) Decontamination of tanks, water lines and filters. *NOTE: Quality check must be performed and within stated acceptable guidelines following any decontamination procedures before laboratory use.*
- C. Corrective Action:  
Switch to back-up tanks (in Chemistry) if quality checks fail and/or service is needed. Another option is to purchase water from outside vendor. All other water used throughout the laboratory is Commercially Bottled Purified Water meeting the requirements stated above.

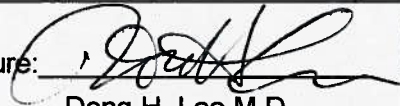
**REFERENCES:**

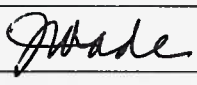
1. College of American Pathologist Checklist, August 2016
2. CLSI Guideline GP40-A4-AMD "Preparation and testing of reagent water in Clinical Laboratory; approved Guideline" 4<sup>th</sup> Edition Volume 26 June, 2012



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DATE ADOPTED	<i>Author of Procedure/Policy</i>	Chief of Service
04/09/2007	Paul D. Gruver, MT	Signature:  Dong H. Lee M.D.
Policy/Procedure(s) Retired:		Date retired:

Review Date	Version Number	Signature of reviewer
11/8/17	2	

**REVISION HISTORY**

Date revised	Revision #	Changes made	Signature
11/7/17	2	Reformatted, revised maintenance requirements and updated references.	