

**WORCESTER POLYTECHNIC INSTITUTE  
HEALTH PHYSICS PROCEDURE HP-07  
POOL WATER AND HOLDUP TANK WATER ANALYSIS**

1. PURPOSE:

To ensure that the levels of radioactive materials in the waste tank contents are within the 10 CFR 20 limit for disposal into the sanitary sewerage system.

2. FREQUENCY:

This procedure shall be performed prior to releasing the contents of the waste tank to the sanitary sewerage system.

3. MATERIALS, TOOLS, AND EQUIPMENT:

3.1. Form(s):

3.1.1. WPI Nuclear Reactor Facility Disposal By Release Into Sanitary Sewerage System (HPF\_12)

3.2. Pole or similar object for stirring the waste tank

3.3. Beaker

3.4. 0.1N HNO<sub>3</sub> solution

3.5. Hot plate

3.6. Heat lamp

3.7. Gas-flow proportional counter or equivalent detection equipment

3.8. Multi-channel analyzer (if required)

4. PRECAUTIONS:

4.1. Ensure that all appropriate health physics practices are followed throughout the procedure.

4.2. Take all necessary precautions to avoid the spread of possible contamination.

4.3. Perform an operability check on all instrumentation used. Ensure that the instrumentation has been calibrated within the proper time limit.



5.3.2.4. Save the spectrum. If desired, print the spectrum and the background count on the same paper.

5.3.3. Record the appropriate information.

6. RESTORATION:

None

7. REFERENCES:

7.1. University of Massachusetts Lowell "Preparation of Liquid Solutions"