A. Purpose:

1. To determine that a firearm is operating properly, and to obtain test specimens from the test firing process. In order to perform a microscopic comparison with a submitted firearm, a minimum of two (2) test shots should be fired and recovered. The recovery method is a water trap which will render the test fired bullet suitable for comparative examinations. The water recovery tank is usually used to recover bullets from handguns and rifles.

B. Responsibility:

1. It is the examiner's responsibility to ensure that the water recovery trap is suitable for use. He or she must first check that the water level is sufficient, that the ventilation is working properly, and that the safety warning devices are functioning, before conducting any test firing in this safe designated laboratory area.

C. Safety:

1. Appropriate hearing and eye protection must be used.
2. The examiner must consider the practicality and/or desirability of wearing some form of bullet resistant clothing or face shield at his or her discretion.
3. No other person should be present in the water recovery trap room during the test firing process unless there is a condition that exists with the firearm, in which the aid of another individual is necessary. This person must take the same precautions by wearing eye and hearing protection.

D. Procedure:

1. Check the water level.
2. Examine the bullet recovery cup to free it of any foreign material, lower it into the bottom of the tank and ensure it seats properly.
3. Turn on the warning light device for the hallway.
4. Turn on the exhaust ventilation so that it draws fumes from the top of the trap.
5. Load the firearm with two cartridges while the firearm is inserted in the recovery trap with the muzzle facing vertically downward. Once the firearm is in this position, the action of the firearm can be closed.

6. Test fire the firearm twice and render it safe and clear of ammunition before removing it from the recovery trap.
7. Retrieve the test specimens from the trap cup. Ensure that all of the test fired specimens are retrieved in the cup.
8. If not all of the specimens are recovered in this process, retrieve them from the bottom of the trap by relieving some of the water through the valves.

E. Equipment:

1. Vertical water recovery trap

F. References:

1. Laboratory safety manual
2. AFTE procedures manual

G. Appropriate Appendices:

1. Appendix 1 -- Worksheets