

**PALM BEACH COUNTY HEALTH DEPARTMENT
DIVISION OF ENVIRONMENTAL HEALTH & ENGINEERING**

**Technical Memorandum 07-1 PR (Supersedes Technical Memorandum 03-1PR)
EFFECTIVE DATE 01/01/2007**

To: Utility Directors, Consulting Engineers, Utility Contractors and Water Laboratories

Re: Release of Water and Wastewater Facilities for Use

Palm Beach County Environmental Control Rule II, (ECR-II), Section 11(C) and 12, and Rule 62-555.340, Florida Administrative Code (F.A.C.) requires that a public water supply facility be bacteriologically cleared and a certification of completion submitted before it can be released for use.

In order to obtain a release for water facilities, the following material must be submitted:

1. Completed Certification of Construction Completion form 62-555.900(9) for Department of Environmental Protection (DEP) permits or PBCHD ECR II 12(3)A for Palm Beach County Health Department (PBCHD) permits.
2. One (1) set of record drawings; in the case of water distribution system, fire line or water main extension, the sample points must be indicated with the completed and certified water main highlighted.
3. Satisfactory results of the bacteriological tests, which must not be more than sixty (60) days old.
4. In the case of well construction, a "Well Completion Report" must be submitted by the well driller and the chemical analysis required by Rule 62-550, F.A.C. and ECR-II. Chemical analysis will be required for contaminants as listed in the permit special conditions.

Full release of water facilities for service will not be granted by the Palm Beach County Health Department until any accompanying wastewater system has been certified by the engineer-of-record and released; or in the case of septic tanks, an approval for installation. To request a release of the wastewater system, the following material must be submitted:

1. Completed DEP Form 62-604.300(8)(b) for Domestic Wastewater Collection/Transmission Systems Certificate of Completion of Construction.
2. One (1) set of record drawings.

Use of construction meters for construction water may be approved by the PBCHD in cases where accompanying wastewater system has not been certified if the department determines the water facility has been satisfactorily tested and certified as described above. Upon receipt of the above, this agency will provide a letter of release for use to the utility provider with a copy to the engineer-of-record via e-mail and regular mail. The water utility is hereby advised not to issue water meters until such time that the new water mains are released for service by the Palm Beach County Health Department.

BACTERIOLOGICAL SAMPLING INFORMATION AND MAIN CLEARANCE GUIDELINES

Satisfactory bacteriological results for clearance for all parts of a community or non-community water supply facility except wells shall be two (2) consecutive daily samples with results indicating an absence of coliform.

The bacteriological analysis report shall be invalid if the pressure in the new water mains is not maintained after the samples were collected and before the system is released for service, or more than sixty (60) days have elapsed since the samples were collected. The bacteriological analysis report must contain the following information.

1. System name and address
2. Collector name (all water samples shall be taken by an employee of a State certified laboratory or a certified operator per PBC ECR-II).
3. Raw or treated water
4. Type of supply
5. Type of sample
6. Date and time sample collected
7. Collection number
8. Sample point identification
9. Field chlorine residual (free and/or combined)
10. Sample number
11. Non-coliform result
12. Total coliform result

The following information is provided to guide you in the disinfection and clearance procedure:

1. The pressure test should be conducted prior to disinfection of the water line.
2. The pressure test, disinfection and flushing shall be conducted in accordance with current AWWA Standards (AWWA C 651, 652, or 653).
3. Surface waters shall not be used to conduct the pressure test or filling of water mains.
4. Water mains within a project shall have only a single point of water supply during bacteriological clearance. All other connections to existing lines shall, as a minimum, be valved off and treated as dead ends with sample taps.
5. Sample points shall be located on the far side of all loops, at all dead ends and no more than 1,200 feet apart. [AWWA C651-99 Sec. 5.1]
6. Fire or flush hydrants may be used as sample taps provided they are supplied with the necessary caps and smaller piping.
7. Sample taps on water mains or fire mains shall flow 24 hours/day during the bacteriological testing.
8. At the time of bacteriological sampling, chlorine residual determination shall be made to insure that chlorine concentration in the main is no higher than that generally in the system (3.0 mg/l free or 5.0 mg/l combined maximum), or less than 0.2 mg/l free or 0.6 mg/ combined. If total chlorine residual exceeds 4.0 mg/l the sample is considered invalid. Tests for chlorine residual must be performed using the DPD Colorimetric test. Use of "chlorine test strips" is no longer allowed.
9. Water treatment plant sample points shall be provided on the incoming raw water, each filter, storage and plant finished water.
10. Bacteriological samples must be analyzed in a laboratory certified by the state Department of Health.

11. For water treatment plants and water mains, two (2) satisfactory samples taken on consecutive days from each sample point are required for bacteriological clearance. A satisfactory sample is the absence of coliform.
12. All raw water mains shall be bacteriologically cleared in accordance with the above procedures except for those supplying a surface water treatment plant.

BACTERIOLOGICAL CLEARANCE FOR WELLS

For a community or non-community water supply system well clearance, the wells shall be cleaned, disinfected and bacteriologically cleared in accordance with Chapter 62-555.315(6), F.A.C. Prior to sampling for bacteriological clearance, the well shall be thoroughly pumped until no trace of the disinfecting agent can be found. Daily samples for twenty (20) or more consecutive workdays shall be collected after pumping the well on each consecutive day for fifteen (15) minutes at the rated capacity of the permanent pump. Upon a showing by the supplier of water that circumstances warrant it, the Department shall allow the required number of samples or collection interval to be modified. No more than two (2) samples, at least six (6) hours apart, shall be collected per day. The samples shall be handled in accordance with acceptable methods as stated in "Standard Methods for the Examination of Water and Wastewater", latest edition.

Samples shall be collected by an employee of a state certified laboratory or a certified operator and analyzed in a state certified laboratory for total residual chlorine, total coliform, and *E. coli*. If any 1 sample shows the presence of free or combined chlorine the sample shall be considered invalid. If any sample shows the presence of *E. coli* the well shall be considered contaminated and must be re-disinfected. If more than ten percent of the total samples or if either of the last two samples show the presence of total coliform the well shall be considered contaminated and must be re-disinfected.

If procedures are varied from the above, or if you have any questions on the above please contact T.D. LeFevre at (561) 355-3070.