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**DWS Policy 91-06**  
**Variations From The Total Coliform Rule**  
(Year 2000 Printing)

Effective Date: 5-18-93  
Program Applicability  
Supersedes Policy, SOP or Guidance #:  
Approved by: David Y. Terry

**Policy, SOP or Guideline # 91-06**

This policy is adopted to establish criteria to be used in evaluating requests from variances from the Total Coliform Rule.

**Policy**

It is the policy of the Division of Water Supply, Department of Environmental Protection, to allow a public water system to operate under a variance to the total coliform rule if the system can demonstrate, using the following criteria, that no unreasonable risk to health exists:

- (1) Over the past thirty days, water entering the distribution system is shown to:
  - (a) Be free from E. Coli or fecal coliform occurrence based on at least daily sampling,
  - (b) Contain less than one total coliform per hundred milliliters of influent water in at least ninety-five percent per cent of all samples based on at least daily sampling,
  - (c) Comply with the total turbidity requirements of MR 22.08 except that surface waters presently filtering should comply with 310 CMR 22.20A(4), and
  - (d) Contain a continuous disinfection residual of at least 0.2 mg/l;
- (2) the system had no waterborne disease outbreak while operated in its present configuration;
- (3) The system maintains biweekly contact with the Division of Water Supply and the local board of health to assess illness possibly attributed to microbial occurrence in the public drinking water system;
- (4) The system has evaluated, on a monthly basis, at least the number of samples specified in 310 CMR 22.05A(1) and has not had an E. Coli-positive compliance sample within the last six months, unless the system demonstrates to the Department that the occurrence is not due to contamination entering the distribution system;
- (5) The system has undergone a sanitary survey conducted by the Department within the past twelve months.

- (6) The system has a cross connection control program approved by the Department and performs an audit of the effectiveness of the program;
- (7) The system agrees to submit a biofilm control plan to the Department within twelve months of the first request of a variance;
- (8) The system monitors general distribution system bacterial quality by conducting heterotropic bacteria plate counts on at last a weekly basis at a minimum of ten percent of the number of total coliform sites specified for that system size in 310 CMR 22.05A(1)(preferably using the R2A medium in method 907A, 907B, or 907C as set forth in the 16<sup>th</sup> edition of Standard Methods for the Examination of Water and Wastewater, 1985, American Public Association, et.al); and
- (9) The system conducts daily monitoring at distribution system sites approved by the Department and maintains a detectable disinfectant residual (measured as specified in 310 CMR 22.20A(a)5) at a minimum of ninety-five percent of those points and a heterotrophic plate count of less than 500 colonies per ml (measured as specified in 310 CMR 22.20A(5)(a) 3) at sites without a disinfectant residual.

### **Rationale**

On January 15, 1991, The EPA published a notice in the Federal Register staying the no variance provision of the Total Coliform rule (40CFR Part 141.4 and 141.63). States can no grant a variance to water systems that meet certain criteria. This change was made because of regrowth problems being experienced by many water systems as a result of biofilm.

Approved: 5-18-93

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David Y. Terry, Director  
Division of Water Supply