Final Statement of Reasons

Monitoring Regulations and Maximum Contaminant Level for Total Coliforms (Including Fecal Coliforms and E. Coli)

Chapter 15. Domestic Water Quality and Monitoring

Title 22, California Code of Regulations

All suppliers of domestic water to the public are subject to regulations adopted by the U. S. Environmental Protection Agency (EPA) under the Safe Drinking Water Act (4L U.S.C. 300f et. seq.) as well as by the California Department of Health Services (CDHS) under the California Safe Drinking Water Act (Sections 4010-4039.6, Health and Safety Code). California has been granted "primacy" for the enforcement of the Federal Act. In order to receive and maintain primacy, states must promulgate regulations which are no less stringent than the federal regulations. has adopted new National Primary Drinking Water Regulations for Total Coliforms (Including Fecal Coliforms and E. Coli) (Federal Register, Vol. 54, No. 124) on June 29, 1989. Therefore the Department is proposing to amend the existing regulations on Domestic Water Quality and Monitoring, Title 22, California Code of Regulations as follows to conform, interpret and implement the new EPA rule. There are a number of sections in the EPA rule that will not be adopted because they have no application within California. Some of the omitted sections are requirements imposed on the states by EPA and are not imposed on the water suppliers. Other omitted sections relate to discretionary alternatives and waivers.

The purpose of this section is to prescribe the requirements for a routine sample siting plan for bacteriological monitoring of the distribution system.

Subsections (a), (a)(1), and (c) conform with federal regulations (40 CFR, Section 141.21(a)(1)) that require a written sample siting plan. In addition, specific criteria for an acceptable plan are added in Subsection (a)(1) to make clear to the water supplier those elements that the plan shall address. The purpose of Subsection (a)(2) is to allow the water supplier to rotate sampling among the sample points. This is needed to ensure that the water supplier is not burdened with collecting more samples than is required by the regulation.

Subsection (b) ensures that personnel collecting samples and performing field tests have been trained in accordance with Section 64415(b) in order to avoid the problems associated with supplier claims that positive data are the result of inadequately trained personnel.

64423. Routine Sampling.

The existing Section 64423 is repealed to conform with Section 141.63(a) and (b) of the new federal regulations.

The purpose of the proposed section is to prescribe the requirements for routine bacteriological monitoring of the

distribution system in terms of the number and frequency of samples to be collected.

Subsection 64423(a) conforms with the basic requirements of the federal regulations (40 CFR, Sections 141.21(a)(2), (3), and (4)), except that the reductions in monitoring frequency allowed under the federal regulation that may be granted by the State have been omitted. In the cases where the federal regulations allow reductions, the resulting monitoring frequency was less than that required by the State's existing bacteriological monitoring regulations; therefore, it has been the Department's experience that the reductions would result in inadequate monitoring and an unacceptable level of health protection. Also ommitted from the proposed regulations were a delay in monitoring according to Table 1 for certain non-community systems, and allowing small systems to collect all samples on one day of the month. Based on the Department's experience, monitoring for all size systems should be at regular intervals and it is not necessary to wait six months before requiring a non-community system with groundwater under the direct influence of surface water to monitor as a community system; the delay could result in a potential risk to public health.

Table 1 in Subsection 64423(a)(1) describes the minimum number of samples that community and some non-community water systems are required to collect at prescribed intervals. To conform with the

federal regulations, (40 CFR, Section 141.21(a)), Table 1 bases number of samples required on the number of service connections. Population also has been added as an alternative basis, using 3.3 persons per service connection as a conversion factor, which is the average derived from all of the systems in the state. The number of service connections has generally been a number which can easily be determined by the water suppliers. There are some systems, however, which may serve a large population through only a few service connections. The use of population is intended to take into account this situation. Section 141.21(a) of the federal regulations requires monitoring on a monthly basis with samples being collected at regular intervals throughout the month. The proposed regulations will retain the existing requirement for monitoring on a weekly, biweekly or monthly basis depending on the number of required samples; consequently, the samples will be collected at routine intervals throughout the month.

Subsections (a)(1), (3), (4), and (5) conform with the federal regulations (40 CFR, Sections 141.21(a)(2) and (3)).

Subsection (a)(2) ensures that non-transient non-community water systems monitor adequately based on the degree of consumer exposure in such systems, including schools and places of work. Monitoring is required only when the systems are operating,

because many of the non-transient, non-community water systems do not operate for the entire year.

Subsection 64423(b) conforms with the federal regulations (40 CFR, Section 141.21(a)(5)), except that the Department has specified that treated water turbidity rather than source water turbidity should not exceed 1 NTU. The reason for this is that the turbidity of the treated water is a better indicator of whether there may be a problem with the bacteriological quality of the water being served to the consumer and, therefore, whether the water needs additional bacteriological monitoring to protect public health. Using the raw water turbidity as an indicator could result in unnecessary sampling, since subsequent treatment may remove the turbidity to less than 1 NTU.

Subsection (c) conforms with the requirements in the federal regulations (40 CFR, Sections 141.21 (b)(1) and 141.21 (b)(4)) which specify the monitoring requirements following a total-coliform positive sample result.

64423.1. Sample Analysis and Reporting of Results.

The purpose of this section is to prescribe the bacteriological analyses and reporting requirements for routine, repeat and replacement samples.