

Topic: South Korean approval of Colilert[®] for drinking water testing
Title: Revision to Official Drinking Water Quality Testing Methods
Source: Korean Ministry of the Environment – translated from Korean into English by IDEXX
Date: 21 June 2002

Report Highlights:

- Colilert is approved for use in the compliance testing of drinking water; specific citation is Page 2, Section 2: “ ...add the enzyme chromogenic method as a new method” (*sic*)
- E coli has been added as an indicator as part of the Ministry of the Environment’s effort to ‘strengthen water quality standards’ (*sic*)– Page 1, section 2b

Law Revisions/Announcements

Title:

Announcement date: June 21, 2002

Field: Water Utilities Management

Original File: [\[download link\]](#)

1. Reasons for revision

In order to achieve drinking water safety and build up trust, the drinking water quality standards are being expanded and strengthened in steps, standards are being introduced for handling of water purification regarding disease-causing microbes, such as viruses and giardia, which are difficult to economically and technically measure and some inadequacies arising in the carrying out of work in the current system are being improved and supplemented in order to maintain water quality standards.

2. Main points

- a. In the event that the results of drinking water quality testing exceed the water quality standards, water quality testing shall be carried out continuously until the water quality standards are satisfied, the causes for exceeding the standards analyzed and, according to this, necessary measures taken, such as facility improvements, in order to achieve improvement so that the safety of drinking water is achieved. (Draft, Article 4, Paragraph 5, newly enacted)
- b. **By strengthening water quality standards for total coliforms and newly adding e. coli and fecal coliforms to the drinking water quality standards, strengthen management of disease-causing microbes.** (Draft, Attachment #1, Item #1)
- c. Delete malathion from the drinking water quality standards as it has not been detected in quantities that exceed the quantitative limit for the last ten-years and adjust the water quality standards regarding harmful materials, such as adding 1,2-dibromo-3-chloropropane to the water quality standards. (Draft, Attachment 1, Item #3)
- d. Stipulate the upper concentration limit for residual chlorine, prevent the production of disinfectant dispersion materials and add five kinds of disinfectant dispersion materials such as halo-ascetic acid to water quality standard testing. (Draft, Appendix 1, #4)
- e. Add water purification according to the standards of water purification to the water quality standards in order to prevent microbes stipulated and announced by the Minister of the Ministry of the Environment such as viruses and giardia from being contained in the water. (Draft, Attachment 1, Article 6)

List [Previous section](#) [Next section](#)

Law Revisions/Announcements

Title: Revisions to Official Drinking Water Quality Testing Methods
Announcement date: June 21, 2002
Field: Water Utilities Maintenance
Original File: [[download link](#)]

1. Reasons for revisions

Stipulate the water quality testing methods for the items newly established as drinking water quality standards in order to achieve drinking water safety. This is in order to contribute to correctness and consistency of water quality testing by considering the development of analysis techniques and adjusting testing methods for some of the existing testing items while supplementing the related matters, such as sample collection and preservation.

2. Main points

- a. Regulate the matters for special care when taking samples for each type of sample and set reasonable preservation periods according to growth characteristics of microbes. (Draft, Chapter 2, Paragraph 2)
- b. Newly enact testing methods for fecal coliforms and e. coli which are newly included in the drinking water quality standards in order to strengthen the management of surface microbes. (Draft, Chapter 3, Paragraph 4, Item 1-4 and Item 1-5, newly enacted)
- c. Supplement the test tube and membrane filtration methods of the existing testing methods for total coliforms, make it so that rapid and correct results can be obtained and **add the enzyme chromogenic method as a new method.** (Draft, Chapter 3, Paragraph 1, Item 1-3)
- d. Newly enact testing methods for six items, including newly designated chloral hydrates as water testing standards. (Draft, Chapter 3, Paragraph 2, Item 2-3-2-4 and Item 2-3-2-5.)

List Previous section Next section

Ministry of the Environment, Publication #2002-91

The Official Drinking Water Quality Testing Methods based on Article 5-2 of the Drinking Water Management Act are revised and announced as follows.

June 21, 2002

Minister of the Ministry of the Environment

Revisions to the Official Drinking Water Quality Testing Methods

The Official Drinking Water Quality Testing Methods (Ministry of the Environment Publication #2000-75, July 1, 2000) are hereby revised as follows:

Item 21 of Chapter 1, Article III is changed to Item 22 and Item 21 is newly enacted as follows:

21. The culture used in the analysis of microbes shall use an available commercially finished product.

Chapter 2, Article 2 shall read as follows:

2. Samples for Microbe Testing

A sterilized sample container must be used when collecting samples for microbial testing and testing must be done immediately after aseptically collecting the samples. If testing cannot be performed immediately, samples must be stored at 4°C. Testing on common bacteria, pseudomonas and other organisms must be performed within 24 hours and testing on other types, such as total coliforms, must be performed within 30 hours.

Before collecting samples containing residual chlorine, sterilized geosodium sulfate solution is added to a sterilized sample collection container up to a final concentration of 0.03% (w/v).

Before collecting samples from a faucet, turn on the faucet and let it run for 2-3 minutes.

Ministry of the Environment, Publication #122

The Revised Provisions of the Rules Regarding the Drinking Water Quality Standards and Testing are announced as follows.

June 21, 2002

Minister of the Ministry of the Environment

Revisions to the Rules Regarding Drinking Water Quality Standards and Testing

The Rules Regarding Drinking Water Quality Standards and Testing are hereby revised as follows.

Within the main text of Article 4, Paragraph 1, the text "Mayors (including mayors of special cities and wide-area cities. Same below.) and County Magistrates (Not including county magistrates of wide-area cities. Same below.) is to read "Mayors, County Magistrates or Heads of Neighborhood Gu-Offices (Means head of Neighborhood Gu-Office of an autonomous neighborhood "Gu". Same below.)"

Within the title of Article 4, Paragraph 1, Item 1, Sub-Item 2, "coliforms" is changed to "total coliforms, e. coli (or fecal coliforms)" and also within the provisions of Sub-Item 2, "common bacteria and e. coli" is to read "common bacteria, total coliforms and e. coli (or fecal coliforms)."

Within the title of Article 4, Paragraph 1, Item 1, Sub-item 3, "All testing categories of Attachment 1" is to read "Testing regarding Items #1-3 and Item #5 of Attachment 1" and also within the provisions of Sub-Item 3, "e. coli" is to read as "total coliforms, e. coli (or fecal coliforms)" and "turbidity, aluminum and residual chlorine" is to read "turbidity and aluminum".

Sub-Item 4 of Article 4, Paragraph 1, Item 1 is newly enacted as follows:

- 4) Testing regarding Item 4 of Attachment 1: One time or more per quarter. However, total trihalomethane and chloroform are tested at least once per month.