



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

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JUN 11 2009

OFFICE OF  
WATER AND WATERSHEDS

Mr. David G. Shaff  
Portland Water Bureau  
1120 SW Fifth Avenue  
Portland, OR 97204

Re: Long-Term 2 Enhanced Surface Water Treatment Rule (LT2)

Dear Mr. Shaff:

Cynthia Dougherty's office has asked me to respond to your letter dated May 14, 2009 on behalf of U.S. EPA Region 10. I would like to acknowledge your frustration and disappointment over the past 14 months as you have pursued a variance from the treatment requirements of the Long-Term 2 Enhanced Surface Water Treatment Rule (LT2). The intent of the LT2 rule is to reduce illness linked with the contaminant *Cryptosporidium* and other pathogenic microorganisms in drinking water. *Cryptosporidium* is a significant concern in drinking water because its presence has been detected in many surface waters used as drinking water sources, it is resistant to chlorine and other disinfectants, and it has caused waterborne disease outbreaks.

The Safe Drinking Water Act (SDWA), at Section 1415(a)(1)(B) allows for the granting of a variance to a public water system from the use of a specified treatment technique if the public water system applying for the variance demonstrates that such treatment technique is not necessary to protect the health of persons because of the nature of the raw water source of such system. The variance shall be conditioned on such monitoring and other requirements as EPA may prescribe.

Portland is the first city in the nation to seek a variance from the LT2 treatment requirements. Other municipalities are watching what EPA does to address Portland's precedent setting request. As public health is concerned, it is important we do all we can to ensure compliance with the Safe Drinking Water Act (SDWA) and to protect public health.

After reviewing your May 14<sup>th</sup> letter along with all of the correspondence and meeting notes from the past 14 months with my staff, I ask that we quickly focus our attention and discussion on the following:

1. The Portland Water Bureau has not yet identified or developed a sampling method or monitoring program that could establish a raw water *Cryptosporidium* level below 0.000075 oocysts/liter. The absence of an accurate and precise sampling method and systematic approach to monitoring is currently the key factor impacting your sampling schedule.

2. Each system requesting a variance under LT2 has to meet the endpoint described in the preamble to the rule [FR vol. 71 No. 3, p. 729] and outlined in the Agency's April 8<sup>th</sup> letter to the Portland Water Bureau. The Agency can require information it deems necessary to demonstrate that treatment is not necessary to protect the health of persons because of the nature of the raw water source of the system under section 1415(a)(1)(B) of the Safe Drinking Water Act (SDWA). See attachment A - Variance Regulations Requirements.

EPA is committed to this effort and will place a high priority on resuming these discussions. I hope we can constructively build on the sequence of events thus far:

- February 20, 2008 – EPA met with the Portland Water Bureau and its stakeholders to discuss the City's intent to submit a request for a variance from the LT2. EPA was presented with a proposal that included collection and review of epidemiology/public health surveillance data and source water monitoring data to justify EPA granting the City a variance without a consideration of the endpoint required by the rule. EPA agreed to answer two questions in connection with the proposal:
  - Could the City use a combination of epidemiology/public health surveillance and source water monitoring to qualify for a variance to LT2 treatment requirements?
  - Would the City have to meet the specified endpoint of 0.000075 oocysts/liter level to demonstrate that its raw water is protective of public health?
- April 8, 2008 – EPA responded to both questions in a letter to the Portland Water Bureau, concluding with the statements “in order to receive a variance the Portland Bureau would have to meet the endpoint (0.000075 oocysts/liter) and public health surveillance studies cannot be accepted in order to demonstrate the raw water is *Cryptosporidium* free.” This statement does not preclude health surveillance studies from supporting a variance. The studies are not a substitute, however, for meeting the endpoint defined in the preamble to the LT2 rule [FR vol. 71 No. 3, p. 729].
- July 23, 2008 – The Portland Water Bureau expressed willingness in writing to sample high volumes of water to meet the specified endpoint for the variance and requested to use grandfathered data.
- September 26, 2008 – At the request of the Portland Water Bureau, EPA scheduled a technical conference call to discuss modifying Sampling Method 1623. The call concluded with the Portland Bureau committing to identify a laboratory to assist with a study design, choose a filter, and submit the study design for EPA to review; and EPA agreeing to provide details of the variance process including the potential to use existing data after review of the Bureau's study design.
- April 23, 2009 – EPA and the Portland Water Bureau held a second technical conference call to discuss the results of the Bureau's study design and a proposed sampling plan.

- May 7, 2009 – EPA wrote to the Portland Water Bureau and explained that the Bureau had not provided enough data to establish that its proposed sampling method and monitoring program could reliably estimate a concentration of <0.000075 oocysts/liter. The letter also provided additional details on information that the Agency would like to see that would help us determine whether providing additional treatment is not necessary to protect the health of persons because of the nature of the raw water source as per section 1415(a)(1)(B) of the SDWA.

EPA very much appreciates the time constraints under which the Portland Water Bureau is operating to come into compliance with LT2 by April 1, 2012 or April 1, 2014, if a two-year extension of the deadline is granted pursuant to 40 CFR §141.713(c). We also understand your keen desire to obtain a variance from the treatment requirements. We are prepared to work closely with the City and to clarify any misunderstandings pertaining to the supporting information needed for a variance request. Establishing a comprehensive sampling and analysis plan for any variance from Federal standards must be done carefully to ensure samples are representative of the source water in Portland and for other cities who may choose to follow Portland's lead. If you have any questions or comments, please do not hesitate to contact either Marie Jennings at 206-553-1893 or me at 206-553-4198.

Sincerely,



Michael A. Bussell, Director  
Office of Water and Watersheds

cc: Ms. Cynthia Dougherty  
Mr. Paul Simon  
Mr. Ronald Bergman  
Ms. Marie Jennings

Attachment

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a representative accompany the Administrator or his representative on such entry.

(c) No State agency which receives notice under paragraph (b) of this section may use the information contained in the notice to inform the person whose property is proposed to be entered of the proposed entry; if a State so uses such information, notice to the agency under paragraph (b) of this section is not required for subsequent inspections of public water systems until such time as the Administrator determines that the agency has provided him satisfactory assurances that it will no longer so use information contained in a notice received under paragraph (b) of this section.

### Subpart E—Variances Issued by the Administrator Under Section 1415(a) of the Act

#### § 142.40 Requirements for a variance.

(a) The Administrator may grant one or more variances to any public water system within a State that does not have primary enforcement responsibility from any requirement respecting a maximum contaminant level of an applicable national primary drinking water regulation upon a finding that:

(1) Because of characteristics of the raw water sources which are reasonably available to the system, the system cannot meet the requirements respecting the maximum contaminant levels of such drinking water regulations despite application of the best technology, treatment techniques, or other means, which the Administrator finds are generally available (taking costs into consideration); and

(2) The granting of a variance will not result in an unreasonable risk to the health of persons served by the system.

(b) The Administrator may grant one or more variances to any public water system within a State that does not have primary enforcement responsibility from any requirement of a specified treatment technique of an applicable national primary drinking water regulation upon a finding that the public water system applying for the variance has demonstrated that such treatment technique is not necessary to pro-

tect the health of persons because of the nature of the raw water source of such system.

#### § 142.41 Variance request.

A supplier of water may request the granting of a variance pursuant to this subpart for a public water system within a State that does not have primary enforcement responsibility by submitting a request for a variance in writing to the Administrator. Suppliers of water may submit a joint request for variances when they seek similar variances under similar circumstances. Any written request for a variance or variances shall include the following information:

(a) The nature and duration of variance requested.

(b) Relevant analytical results of water quality sampling of the system, including results of relevant tests conducted pursuant to the requirements of the national primary drinking water regulations.

(c) For any request made under § 142.40(a):

(1) Explanation in full and evidence of the best available treatment technology and techniques.

(2) Economic and legal factors relevant to ability to comply.

(3) Analytical results of raw water quality relevant to the variance request.

(4) A proposed compliance schedule, including the date each step toward compliance will be achieved. Such schedule shall include as a minimum the following dates:

(i) Date by which arrangement for alternative raw water source or improvement of existing raw water source will be completed.

(ii) Date of initiation of the connection of the alternative raw water source or improvement of existing raw water source.

(iii) Date by which final compliance is to be achieved.

(5) A plan for the provision of safe drinking water in the case of an excessive rise in the contaminant level for which the variance is requested.

(6) A plan for additional interim control measures during the effective period of variance.

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(d) For any request made under § 142.40(b), a statement that the system will perform monitoring and other reasonable requirements prescribed by the Administrator as a condition to the variance.

(e) Other information, if any, believed to be pertinent by the applicant.

(f) Such other information as the Administrator may require.

[41 FR 2918, Jan. 20, 1976, as amended at 52 FR 20675, June 2, 1987]

**§ 142.42 Consideration of a variance request.**

(a) The Administrator shall act on any variance request submitted pursuant to § 142.41 within 90 days of receipt of the request.

(b) In his consideration of whether the public water system is unable to comply with a contaminant level required by the national primary drinking water regulations because of the nature of the raw water source, the Administrator shall consider such factors as the following:

(1) The availability and effectiveness of treatment methods for the contaminant for which the variance is requested.

(2) Cost and other economic considerations such as implementing treatment, improving the quality of the source water or using an alternate source.

(c) A variance may be issued to a public water system on the condition that the public water system install the best technology, treatment techniques, or other means, which the Administrator finds are available (taking costs into consideration) and based upon an evaluation satisfactory to the Administrator that indicates that alternative sources of water are not reasonably available to the public water system.

(d) In his consideration of whether a public water system should be granted a variance to a required treatment technique because such treatment is unnecessary to protect the public health, the Administrator shall consider such factors as the following:

(1) Quality of the water source including water quality data and pertinent sources of pollution.

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(2) Source protection measures employed by the public water system.

[41 FR 2918, Jan. 20, 1976, as amended at 52 FR 20675, June 2, 1987; 63 FR 43847, Aug. 14, 1998]

**§ 142.43 Disposition of a variance request.**

(a) If the Administrator decides to deny the application for a variance, he shall notify the applicant of his intention to issue a denial. Such notice shall include a statement of reasons for the proposed denial, and shall offer the applicant an opportunity to present, within 30 days of receipt of the notice, additional information or argument to the Administrator. The Administrator shall make a final determination on the request within 30 days after receiving any such additional information or argument. If no additional information or argument is submitted by the applicant the application shall be denied.

(b) If the Administrator proposes to grant a variance request submitted pursuant to § 142.41, he shall notify the applicant of his decision in writing. Such notice shall identify the variance, the facility covered, and shall specify the period of time for which the variance will be effective.

(1) For the type of variance specified in § 142.40(a) such notice shall provide that the variance will be terminated when the system comes into compliance with the applicable regulation, and may be terminated upon a finding by the Administrator that the system has failed to comply with any requirements of a final schedule issued pursuant to § 142.44.

(2) For the type of variance specified in § 142.40(b) such notice shall provide that the variance may be terminated at any time upon a finding that the nature of the raw water source is such that the specified treatment technique for which the variance was granted is necessary to protect the health of persons or upon a finding that the public water system has failed to comply with monitoring and other requirements prescribed by the Administrator as a condition to the granting of the variance.

(c) For a variance specified in § 142.40(a)(1) the Administrator shall propose a schedule for:

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(1) Compliance (including increments of progress) by the public water system with each contaminant level requirement covered by the variance; and,

(2) Implementation by the public water system of such additional control measures as the Administrator may require for each contaminant covered by the variance.

(d) The proposed schedule for compliance shall specify dates by which steps towards compliance are to be taken, including at the minimum, where applicable:

(1) Date by which arrangement for an alternative raw water source or improvement of existing raw water source will be completed.

(2) Date of initiation of the connection for the alternative raw water source or improvement of the existing raw water source.

(3) Date by which final compliance is to be achieved.

(e) The proposed schedule may, if the public water system has no access to an alternative raw water source, and can effect or anticipate no adequate improvement of the existing raw water source, specify an indefinite time period for compliance until a new and effective treatment technology is developed at which time a new compliance schedule shall be prescribed by the Administrator.

(f) The proposed schedule for implementation of additional interim control measures during the period of variance shall specify interim treatment techniques, methods and equipment, and dates by which steps toward meeting the additional interim control measures are to be met.

(g) The schedule shall be prescribed by the Administrator at the time of granting of the variance, subsequent to provision of opportunity for hearing pursuant to § 142.44.

[41 FR 2918, Jan. 20, 1976, as amended at 52 FR 20675, June 2, 1987]

### § 142.44 Public hearings on variances and schedules.

(a) Before a variance and schedule proposed by the Administrator pursuant to § 142.43 may take effect, the Administrator shall provide notice and opportunity for public hearing on the

variance and schedule. A notice given pursuant to the preceding sentence may cover the granting of more than one variance and a hearing held pursuant to such notice shall include each of the variances covered by the notice.

(b) Public notice of an opportunity for hearing on a variance and schedule shall be circulated in a manner designed to inform interested and potentially interested persons of the proposed variance and schedule, and shall include at least the following:

(1) Posting of a notice in the principal post office of each municipality or area served by the public water system, and publishing of a notice in a newspaper or newspapers of general circulation in the area served by the public water system; and

(2) Mailing of a notice to the agency of the State in which the system is located which is responsible for the State's water supply program, and to other appropriate State or local agencies at the Administrator's discretion.

(3) Such notice shall include a summary of the proposed variance and schedule and shall inform interested persons that they may request a public hearing on the proposed variance and schedule.

(c) Requests for hearing may be submitted by any interested person other than a Federal agency. Frivolous or insubstantial requests for hearing may be denied by the Administrator. Requests must be submitted to the Administrator within 30 days after issuance of the public notices provided for in paragraph (b) of this section. Such requests shall include the following information:

(1) The name, address and telephone number of the individual, organization or other entity requesting a hearing;

(2) A brief statement of the interest of the person making the request in the proposed variance and schedule, and of information that the requester intends to submit at such hearing;

(3) The signature of the individual making the request, or, if the request is made on behalf of an organization or other entity, the signature of a responsible official of the organization or other entity.

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(d) The Administrator shall give notice in the manner set forth in paragraph (b) of this section of any hearing to be held pursuant to a request submitted by an interested person or on his own motion. Notice of the hearing shall also be sent to the persons requesting the hearing, if any. Notice of the hearing shall include a statement of the purpose of the hearing, information regarding the time and location for the hearing, and the address and telephone number of an office at which interested persons may obtain further information concerning the hearing. At least one hearing location specified in the public notice shall be within the involved State. Notice of hearing shall be given not less than 15 days prior to the time scheduled for the hearing.

(e) A hearing convened pursuant to paragraph (d) of this section shall be conducted before a hearing officer to be designated by the Administrator. The hearing shall be conducted by the hearing officer in an informal, orderly and expeditious manner. The hearing officer shall have authority to call witnesses, receive oral and written testimony and take such other action as may be necessary to assure the fair and efficient conduct of the hearing. Following the conclusion of the hearing, the hearing officer shall forward the record of the hearing to the Administrator.

(f) The variance and schedule shall become effective 30 days after notice of opportunity for hearing is given pursuant to paragraph (b) of this section if no timely request for hearing is submitted and the Administrator does not determine to hold a public hearing on his own motion.

[41 FR 2918, Jan. 20, 1976, as amended at 52 FR 20675, June 2, 1987]

§ 142.45 Action after hearing.

Within 30 days after the termination of the public hearing held pursuant to § 142.44, the Administrator shall, taking into consideration information obtained during such hearing and relevant information, confirm, revise or rescind the proposed variance and schedule.

[52 FR 20675, June 2, 1987]

40 CFR Ch. I (7-1-07 Edition)

§ 142.46 Alternative treatment techniques.

The Administrator may grant a variance from any treatment technique requirement of a national primary drinking water regulation to a supplier of water, whether or not the public water system for which the variance is requested is located in a State which has primary enforcement responsibility, upon a showing from any person that an alternative treatment technique not included in such requirement is at least as efficient in lowering the level of the contaminant with respect to which such requirements were prescribed. A variance under this paragraph shall be conditioned on the use of the alternative treatment technique which is the basis of the variance.

Subpart F—Exemptions Issued by the Administrator

§ 142.50 Requirements for an exemption.

(a) The Administrator may exempt any public water system within a State that does not have primary enforcement responsibility from any requirement regarding a maximum contaminant level or any treatment technique requirement, or from both, of an applicable national primary drinking water regulation upon a finding that—

(1) Due to compelling factors (which may include economic factors, including qualification of the public water system as a system serving a disadvantaged community pursuant to section 1452(d) of the Act), the public water system is unable to comply with such contaminant level or treatment technique requirement or to implement measures to develop an alternative source of water supply;

(2) The public water system was in operation on the effective date of such contaminant level or treatment technique requirement, or for a public water system that was not in operation by that date, no reasonable alternative source of drinking water is available to such new public water system;

(3) The granting of the exemption will not result in an unreasonable risk to health; and

(4) Management or restructuring changes (or both), as provided in