§ 142.60 Variances from the maximum contaminant level for total trihalomethanes.

(a) The Administrator, pursuant to section 1415(a)(1)(A) of the Act, hereby identifies the following as the best technology, treatment techniques or other means generally available for achieving compliance with the maximum contaminant level for total trihalomethanes (§ 141.12(c)):

1. Use of chloramines as an alternate or supplemental disinfectant or oxidant.
2. Use of chlorine dioxide as an alternate or supplemental disinfectant or oxidant.
3. Improved existing clarification for THM precursor reduction.
4. Moving the point of chlorination to reduce TTHM formation and, where necessary, substituting for the use of chlorine as a pre-oxidant chloramines, chlorine dioxide or potassium permanganate.
5. Use of powdered activated carbon for THM precursor or TTHM reduction seasonally or intermittently at dosages not to exceed 10 mg/L on an annual average basis.

(b) The Administrator in a state that does not have primary enforcement responsibility or a state with primary enforcement responsibility (primacy state) that issues variances shall require a community water system to install and/or use any treatment method identified in § 142.60(a) as a condition for granting a variance unless the Administrator or primacy state determines that such treatment method identified in § 142.60(a) is not available and effective for TTHM control for the system. A treatment method shall not be considered to be “available and effective” for an individual system if the treatment method would not be technically appropriate and technically feasible for that system or would only result in a marginal reduction in TTHM for the system. If, upon application by a system for a variance, the Administrator or primacy state that issues variances determines that none
of the treatment methods identified in §142.60(a) is available and effective for the system, that system shall be entitled to a variance under the provisions of section 1415(a)(1)(A) of the Act. The Administrator’s or primacy state’s determination as to the availability and effectiveness of such treatment methods shall be based upon studies by the system and other relevant information. If a system submits information intending to demonstrate that a treatment method is not available and effective for TTHM control for that system, the Administrator or primacy state shall make a finding whether this information supports a decision that such treatment method is not available and effective for that system before requiring installation and/or use of such treatment method.

(c) Pursuant to §142.43(c) through (g) or corresponding state regulations, the Administrator or primacy state that issues variances shall issue a schedule of compliance that may require the system being granted the variance to examine the following treatment methods (1) to determine the probability that any of these methods will significantly reduce the level of TTHM for that system, and (2) if such probability exists, to determine whether any of these methods are technically feasible and economically reasonable, and that the TTHM reductions obtained will be commensurate with the costs incurred with the installation and use of such treatment methods for that system:

- Introduction of off-line water storage for THM precursor reduction.
- Aeration for TTHM reduction, where geographically and environmentally appropriate.
- Introduction of clarification where not currently practiced.
- Consideration of alternative sources of raw water.
- Use of ozone as an alternate or supplemental disinfectant or oxidant.

(d) If the Administrator or primacy state that issues variances determines that a treatment method identified in §142.60(c) is technically feasible, economically reasonable and will achieve TTHM reductions commensurate with the costs incurred with the installation and/or use of such treatment method for the system, the Administrator or primacy state shall require the system to install and/or use that treatment method in connection with a compliance schedule issued under the provisions of section 1415(a)(1)(A) of the Act. The Administrator’s or primacy state’s determination shall be based upon studies by the system and other relevant information. In no event shall the Administrator require a system to install and/or use a treatment method not described in §142.60(a) or (c) to obtain or maintain a variance from the TTHM Rule or in connection with any variance compliance schedule.

[48 FR 8414, Feb. 28, 1983]

§142.61 Variances from the maximum contaminant level for fluoride.

(a) The Administrator, pursuant to section 1415(a)(1)(A) of the Act, hereby identifies the following as the best technology, treatment techniques or other means generally available for achieving compliance with the Maximum Contaminant Level for fluoride:

(1) Activated alumina absorption, centrally applied
(2) Reverse osmosis, centrally applied

(b) The Administrator in a state that does not have primary enforcement responsibility or a state with primary enforcement responsibility (primacy state) that issues variances shall require a community water system to install and/or use any treatment method identified in §142.61(a) as a condition for granting a variance unless the Administrator or the primacy state determines that such treatment method identified in §142.61(a) is not available and effective for fluoride control for the system. A treatment method shall not be considered to be “available and effective” for an individual system if the treatment method would not be technically appropriate and technically feasible for that system. If, upon application by a system for a variance, the Administrator or primacy state that issues variances determines that none of the treatment methods identified in §142.61(a) are available and effective for the system, that system shall be entitled to a variance under the provisions of section