EPA
United States
Environmental Protection
Agency

Basic Questions and Answers for the Drinking Water Strategy Contaminant Groups Effort

1 – What factors did the Agency consider in deciding what should be the first group of contaminants to be addressed under the new Drinking Water Strategy?

The Agency considered several factors in evaluating which contaminants might effectively be regulated as a group. Some of these factors included whether the contaminants in the group: (a) have a similar health endpoint, (b) can be measured by the same analytical methods, (c) can be treated using the same technology or treatment technique approach and/or (d) have been shown to occur individually. They may also be likely to occur together (i.e., co-occur). EPA conducted extensive national outreach to solicit input from stakeholders and stakeholders generally agreed that these were some of the more important factors to consider in evaluating which contaminants would work best in a group regulation.

2 – Why did EPA choose carcinogenic volatile organic compounds (VOCs) as the first group to address in the near-term?

After carefully considering input from stakeholders, EPA decided to address as a group up to 16 volatile organic compounds (VOCs) that may cause cancer. The Agency determined that they represent a near term opportunity and also meet the factors listed in question 1: a) the public health goal for all is currently or would likely be set at zero because they may cause cancer, (b) most of this group of VOCs can be measured by the same analytical method (i.e., EPA 524.2), (c) many can be treated by the same treatment (i.e., aeration and/or granular activated carbon), and (d) a preliminary evaluation of occurrence indicates that some of these VOCs may co-occur. This group will include trichloroethylene (TCE) and tetrachloroethylene (PCE). EPA determined in March, 2010 that the drinking water standards for these two currently regulated contaminants need to be revised. Addressing these VOCs as a group will help reduce exposure to these contaminants.

3 – Which carcinogenic volatile organic compounds is the Agency considering in this group?

The Agency is considering eight currently regulated compounds (benzene; carbon tetrachloride; 1,2-dichloroethane; 1,2-dichloropropane; dichloromethane; tetrachloroethylene; trichloroethylene; vinyl chloride) and eight unregulated compounds (aniline; benzyl chloride; 1,3-butadiene; 1,1-dichloroethane; nitrobenzene; oxirane methyl; 1,2,3-trichloropropane and urethane). All of these VOCs are known or suspected to cause cancer.

4 – What are your next steps and how long will it take to develop a regulation for this group?

We expect to initiate regulatory efforts to begin addressing carcinogenic VOCs by the end of March 2011. Typically, it takes about 2 to 2.5 years to develop a proposed rule and about 2 years to promulgate a final rule.

5 – Has the Agency decided yet what approach will be used in setting a standard for this group and what level you will set?

At this time, the Agency has not decided what the group approach will be for these VOCs and what level will be set. Any decisions will be based on the best available science and our responsibilities under the law.

6 – Have you used a group approach before to regulate contaminants?

This group approach is not new for drinking water. We have regulated several contaminants using a group approach. This includes the regulations for the total haloacetic acids and total trihalomethanes as well as for gross alpha and gross beta radionuclides.

7 – Is the Agency going to consider other groups?

Yes. In the near-term, EPA also will evaluate whether to regulate nitrosamine disinfection byproducts as part of the Contaminant Candidate List Regulatory Determination process. Data from the second Unregulated Contaminant Monitoring Rule indicate that these compounds are frequently being found in public water systems. In the long-term, EPA will continue to work with our stakeholders to evaluate and fill the data gaps for other groups of interest for drinking water.

8 – How does this relate to the decision to revise the drinking water standards for TCE and PCE?

TCE and PCE are volatile organic compounds used in industrial and/or textile processing. In March, 2010, EPA determined that scientific advances allow for stricter regulations for these carcinogenic compounds and announced that the agency would initiate rulemaking efforts to revise the standards using the strategy's framework. Both of these contaminants will be included in the new VOC drinking water standard under development. The current Maximum Contaminant Levels (MCLs) for both of these contaminants are 0.005 milligrams per liter.

More information is available on EPA's website :
TCE at http://water.epa.gov/drink/contaminants/basicinformation/trichloroethylene.cfm
PCE at http://water.epa.gov/drink/contaminants/basicinformation/tetrachloroethylene.cfm
Six Year Review at: water.epa.gov/rulesregs/regulatingcontaminants/sixyearreview/index.cfm