

Fact Sheet: Announcement of Completion of EPA's Second Review of Existing Drinking Water Standards

The Safe Drinking Water Act (SDWA) requires EPA to review each National Primary Drinking Water Regulation (NPDWR) at least once every six years and revise them, if appropriate. The purpose of the review, called the Six-Year Review, is to identify those NPDWRs for which current health effects assessments, changes in technology, and/or other factors provide a health or technical basis to support a regulatory revision that will maintain or strengthen public health protection.

### **Questions and Answers**

## 1. What is the Environmental Protection Agency (EPA) announcing?

In March 2010, the Agency announced the completion of its second review of existing NPDWRs (i.e., the Six-Year Review 2). After performing a detailed review of 71 existing NPDWRs, the Agency determined that 67 NPDWRs remain appropriate (i.e., do not need to be revised) and 4 NPDWRs are candidates for regulatory revision. These four NPDWRs include acrylamide, epichlorohydrin, tetrachloroethylene, and trichloroethylene. In addition to the 71 NPDWRs, this review includes 14 other NPDWRs that did not need a detailed review because of recent or ongoing regulatory actions.

## 2. Why did EPA review these NPDWRs?

The 1996 SDWA Amendments require EPA to periodically review existing NPDWRs and, if appropriate, revise them. This requirement is contained in Section 1412(b)(9) of SDWA, which reads:

The Administrator shall, not less often than every 6 years, review and revise, as appropriate, each national primary drinking water regulation promulgated under this title. Any revision of a national primary drinking water regulation shall be promulgated in accordance with this section, except that each revision shall maintain, or provide for greater, protection of the health of persons.

## 3. What NPDWRs are covered by this action?

The Six-Year Review process only applies to existing national primary drinking water regulations (i.e., currently regulated contaminants). Unregulated contaminants, such as those listed on the Contaminant Candidate List (CCL) are not covered by the Six-Year Review. The current 2003-2009 review specifically focused on a detailed review of 71 NPDWRs promulgated prior to 2005. The Agency included 14 other NPDWRs (e.g., lead, copper, disinfection byproducts, and the microbiological NPDWRs) in the review. However, these regulations did not need a detailed assessment because they are the subject of recent or ongoing rulemaking activity.

## 4. How did EPA review the NPDWRs?

The primary goal of the Six-Year Review is to identify, prioritize and target candidates for regulatory revision that are most likely to result in a meaningful opportunity for health risk reduction and/or cost savings to public water systems and their customers while maintaining or providing for greater levels of public health protection. To address this goal and as part of the first Six-Year Review (i.e., Six-Year Review 1), EPA developed a protocol to perform the review based on extensive inputs that included consultations with the National Drinking Water Advisory Council (NDWAC) and the Science Advisory Board. For Six-Year Review 2, EPA applied the same protocol with some refinements to improve the tracking of a contaminant through the decision process.

The protocol focuses on several key elements that are intended to identify NPDWRs for which there is a health or technological basis for revising the NPDWR. The review relied upon an evaluation of relevant, new information for the following key technical elements: health effects, analytical methods improvements, treatment technology effectiveness, occurrence and exposure analyses, and other potential regulatory changes. Figure 1 provides a general overview of the protocol used to evaluate the NPDWRs and categorize the results (i.e., revise/take no action).

#### Figure 1. Six-Year Review Protocol Overview and Major Categories of Revise/Take No Action Outcomes.



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# 5. What are the overall review results for Six-Year Review 2?

Based on its review, EPA believes that four NPDWRs are candidates for regulatory revision. These four NPDWRs are acrylamide, epichlorohydrin, tetrachloroethylene, and trichloroethylene. EPA believes the remaining 67 NPDWRs are not appropriate for revision due to one or more of the following reasons:

- A health effects assessment is in process or the Agency is considering whether to initiate an assessment;
- The NPDWR remains appropriate after review of new, relevant data/information;
- New, relevant information is available that indicate a potential change in the NPDWR but no revision is recommended because it would result in a negligible gain in public health protection and/or cost savings; or
- Information gap(s) and/or emerging information were identified.

Table 1 lists EPA's review results for each of the 71 NPDWRs that were a part of this detailed review along with the principal rationale for the review outcomes. Table 1 also includes a list of the 14 NPDWRs that have been or are being reviewed/revised by recent or ongoing regulatory actions..

## 6. Will EPA consider reviewing any NPDWRs before the next review cycle?

If the result of any ongoing health risk assessment or the resolution of data gaps/research needs indicate that significant or compelling new information becomes available that will change the basis for an NPDWR, the Agency may decide to accelerate the review schedule for a particular NPDWR.

# 7. What are the next steps?

EPA will consider the public comments and/or any new, relevant, peer-reviewed data submitted for the four NPDWRs listed as candidates for revision as the Agency proceeds with the regulatory revisions for these regulations. The announcement that the Agency intends to revise an NPDWR (pursuant to SDWA section 1412(b)(9)) is not a regulatory decision. Instead, it initiates a regulatory process that will involve more detailed analyses of health effects, analytical and treatment feasibility, occurrence, benefits, costs, and other regulatory matters relevant to deciding whether an NPDWR should be revised. The Six-Year Review results do not obligate the Agency to revise an NPDWR in the event that EPA determines during the regulatory process that revisions are no longer appropriate and discontinues further efforts to revise an NPDWR. Similarly, the fact that an NPDWR has not been selected for revision means only that EPA believes that regulatory changes to a particular NPDWR are not appropriate at this time for the reasons listed in the answer to question 5.

## 8. Where can I find more information about this notice and the Six-Year Review?

For information on the Six-Year Review, please visit the EPA internet website, <u>www.epa.gov/safewater/review.html</u>. For general information on drinking water, please visit the EPA Safewater website at <u>www.epa.gov/safewater</u> or contact the Safe Drinking Water Hotline at 1800-426-4791. Local or international calls can reach the Hotline at 703-412-3330. The Safe Drinking Water Hotline is open Monday through Friday, excluding legal holidays, from 10:00 a.m. to 4:00 p.m. Eastern time.

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Table 1. Summary of Six-Year Review 2 Results				
Recent or Concurrent Action (14 NPDWRs)			Bromate Chloramines	Cryptosporidium Giardia lamblia
			Chlorine	HAA5
			Chlorine dioxide	Lead
			Chlorite	Legionella
			Coliform	11HMs
			Copper	Viruses
Not Appropriate for Revision at this Time	Health effects assessment in process or potential nominee for an assessment (32 NPDWRs)		Alpha particles (or emitters) <sup>1</sup>	Dichloromethane
			Antimony	Di(2-ethylhexyl)adipate
			Arsenic	Di(2-ethylhexyl)phthalate <sup>1</sup>
			Asbestos	Ethylbenzene
			Benzo(a)pyrene <sup>1</sup>	Fluoride
			Beryllium	Nitrate
			Beta particles and photon emitters	Nitrite
				Pentachiorophenol <sup>1</sup>
			Carbon tetrachloride <sup>1</sup>	Polychlorinated biphenyls (PCBs)
			Chromium	Radiums
			Cyanide	Selenium
			1,2-Dichlorobenzene	Styrene
			1,4-Dichlorobenzene	2,3,7,8-1CDD (dioxin) <sup>1</sup>
			1,2-Dichloroethane	Inallium
			cis-1,2-Dichloroethylene	1,2,4-Trichlorobenzene
			trans-1,2-Dichloroethylene	Uranium
	NPDWR remains appropriate after data/information review (8 NPDWRs)		Dalapon	Methoxychlor Monochlorobenzene
			Dinoseb	(chlorobenzene)
			Endrin Ethydana Dibransida (EDD)	2,4,5-Trichorophenoxy-propionic acid
			Elnylene Dibromide (EDB)	(2,4,5-TP)
				Hontachlor
	New information, but no revision	Low priority (24 NPDWRs)	Alachlor	Heptachlor enovide
			Barium	Heyachlorobenzene
			Benzene	Hexachlorocyclonentadiene
			Chlordane	Lindane
			1,2-Dibromo-3-chloropropane	Ovamul
			(DBCP)	Picloram
			1,1-Dichloroethylene	Toluene
			1,2-Dichloropropane	Toxaphene
	recom-		2,4-Dichlorophenoxyacetic acid (2,4-	1 1 1-Trichloroethane
	mended because:		D)	1 1 2-Trichloroethane
			Diquat	Xvlenes
			Endothall	Vinvl chloride
			Glyphosate	
		Emerging information	Atrazina	
		or data gaps	Allazifie	Simazine
		(3 NPDWRs)	aivuiuiali	
Candidate	Based on new information		Acrylamide <sup>2</sup>	Tetrachloroethylene (PCE) <sup>2</sup>
for Revision (4 NPDWRs)		Epichlorohydrin	Trichloroethylene (TCE) <sup>2</sup>	
1. For these compounds, there is no potential to change the MCL based on changes in analytical feasibility or there may be a				

potential change to the MCL based on analytical feasibility but any such change is unlikely to provide a meaningful opportunity to improve public health protection. Therefore, EPA chose to leave these in the ongoing health assessment category. 2. Note that a health assessment is in process but new analytical feasibility and TT information may justify a revision

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