Review of National Primary Drinking Water Regulations: Health-Based Selection Criteria for Chemical Contaminants

(This Issue Paper Is for Stakeholder Discussion and May Not Reflect Official EPA Policy)

EPA has developed a preliminary screening mechanism for identifying regulated chemicals that should be considered based on health effects. The resultant health-based approach for the selection of regulated chemicals that need to be reviewed is outlined below.

ISSUES/ACTIVITIES

Within EPA, the Office of Research and Development (ORD) through its Integrated Risk Information System (IRIS) and the Office of Pesticide Programs (OPP) have conducted, or are in the process of conducting, comprehensive new assessments of the toxicity of a number of chemicals for which EPA has set NPDWRs. Assessments by OPP and IRIS undergo internal and external peer reviews by health scientists. Where possible, an oral Reference Dose (RfD) is derived and carcinogenicity assessment from oral exposure conducted. Our selection criteria build on the availability of these peer reviewed assessments.

The following criteria are proposed to identify chemical contaminants potentially requiring review:

- First: RfD and/or carcinogenicity assessment conducted by IRIS or OPP are different from and more recent than those used to derive the MCLG/MCL;

- Second: IRIS or OPP assessments are in progress with expected completion dates in Fiscal Year 2000.

- Third: EPA will conduct literature searches to identify valid toxicological and epidemiological studies on the reproductive and developmental toxicity of all regulated chemicals (excepting those that are on separate regulatory tracks such as disinfection by-products or arsenic). Chemicals for which such new data have become available will be identified and EPA will accord these higher priority for re-evaluation.

Health-based considerations are only one part of the selection process. A final list of NPDWRs requiring further review and possible revision is to be developed based on additional considerations such as occurrence data and improvements in analytical techniques.
Once the final list of NPDWRs requiring further review is available, i.e., as the full screening process is applied under the 6-year review, an up-to-date evaluation of the health effects information for the selected chemicals will be conducted by EPA. Such evaluations may include collecting any new information on reproductive and developmental effects, as well as any effect of these chemicals on sensitive sub-populations such as infants, children, pregnant women, the elderly, and the seriously ill.

QUESTIONS

- Do stakeholders agree that the EPA IRIS and OPP assessments postdating the NPDWR represent a reasonable way to screen contaminants for review, and would there be other assessments upon which to base a screening decision?

- Do stakeholders agree that the end of Fiscal Year 2000 is a reasonable cut off date for considering new health effects information for the first 6-Year round of review?

- Do stakeholders agree that EPA will update health effects' information for only those contaminants that are on the final list of priority chemicals requiring review?

- Please address written comments on the discussion questions to the Office of Ground Water and Drinking Water
  - **Mailing Address:**
    Office of Ground Water and Drinking Water (4601)
    Ariel Rios Building
    1200 Pennsylvania Avenue, NW
    Washington, DC 20460-0003
  - **Phone and Fax:**
    Phone: 202-564-3750
    Fax: 202-564-3753 (Director's office)