

**Follow-up for the HBSL Session of the Ground Water Status & Trends Meeting,
April 22, 2005, San Antonio, TX**

April 29, 2005

Suggested guidance on the use of Health-Based Screening Levels (HBSLs) for interpreting water-quality data in a human-health context in various types of water-quality assessments is provided below:

1. For local- and state-scale ground-water reports: Regulated and unregulated compounds are assessed separately. Measured concentrations of regulated compounds are compared to MCLs and measured concentrations of unregulated compounds are compared to HBSLs. This applies to VOCs, pesticides, trace elements, and all other USGS/NAWQA analytes. Guidance is provided on pages 8-13 of the following report, and specific examples of implementing this guidance are provided on pages 13-51 of this same report:

Toccalino, P.L., Norman, J.E., and others, 2004, Application of health-based screening levels to ground-water quality data in a state-scale pilot effort: Reston, Va., U.S. Geological Survey Scientific Investigations Report 2004-5174, 64 p. Available online at <http://water.usgs.gov/pubs/sir/2004/5174/sir20045174.pdf>

2. For regional (multi-state)- and national-scale ground-water reports: Guidance is under development and specific recommendations may be available by Fall 2005. This guidance will provide recommendations on the use of MCLs, HBSLs, or both for regulated compounds in various types of regional- and national-scale water-quality assessments. Measured concentrations of unregulated compounds are compared to HBSLs. This new guidance will apply to VOCs, pesticides, trace elements, and all other USGS/NAWQA analytes. In the meantime, the guidance provided in the New Jersey report above can serve as a starting point for reports at these scales.
3. Two additional reports are in draft status; these are ground water Source Water Quality Assessment (SWQA) reports in the NVBR and GAFL study units. When published, these reports also will provide examples of implementing the guidance in the New Jersey report for interpreting water-quality data in a human-health context for public-supply wells using MCLs for regulated compounds and HBSLs for unregulated compounds.
4. Additional background information about HBSLs is provided on an internal USGS web page (<http://water.usgs.gov/nawqa/HBSL/>). We anticipate that this web page will be updated in the next 6-8 months to provide links to guidance documents and to provide tables of human-health benchmarks (MCLs, Lifetime Health Advisories, Risk-Specific Doses, and HBSLs) for NAWQA analytes.