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The arsenic human health criteria from the 1992 National Toxics Rule pose a number of problems. I had commented to EPA during that rule making that inorganic arsenic is the carcinogen of concern but most of the arsenic in fish tissues is in an organic form and not a problem. EPA responded that they agreed with my comment, and solved it by putting in a footnote that it pertains to inorganic arsenic only.

The percentage of inorganic arsenic to total arsenic in fish and shellfish tissues is around 1%. The EPA needed to adjust the criteria but did not. The criteria for marine waters is .14 ppb, or about 1/10th the background concentration in the world's oceans.

The latest EPA action on arsenic human health criteria is the California Toxics Rule, and a footnote should be added to show that action. It is quoted below:

The California Toxics Rule (CTR) was published in the Federal Register on May 18, 2000, at 65 FR 31681.

b. Arsenic Criteria

EPA is not promulgating human health criteria for arsenic in today's rule. EPA recognizes that it promulgated human health water quality criteria for arsenic for a number of States in 1992, in the NTR, based on EPA's 1980 section 304(a) criteria guidance for arsenic established, in part, from IRIS values current at that time. However, a number of issues and uncertainties existed at the time of the CTR proposal concerning the health effects of arsenic. These issues and uncertainties were summarized in "Issues Related to Health Risk of Arsenic" which is contained in the administrative record for today's rule. During the period of this rulemaking action, EPA commissioned a study of arsenic health effects by the National Research Council (NRC) arm of the National Academy of Sciences. EPA received the NRC report in March of 1999. EPA scientists reviewed the report, which recommended that EPA lower the Safe Drinking Water Act arsenic maximum contaminant level (MCL) as soon as possible (The arsenic MCL is currently 50 µg/l.) The bladder cancer analysis in the NRC report will provide part of the basis for the risk assessment of a proposed revised arsenic MCL in the near future. After promulgating a revised MCL for drinking water, the Agency plans to revise the CWA 304(a) human health criteria for arsenic in order to harmonize the two standards. Today's rule defers promulgating arsenic criteria based on the Agency's previous risk assessment of skin cancer. In the meantime, permitting authorities in California should rely on existing narrative water quality criteria to establish effluent limitations as necessary for arsenic. California has previously expressed its science and policy position by establishing a criterion level of 5 µg/l for arsenic. Permitting authorities may, among other considerations, consider that value when evaluating and interpreting narrative water quality criteria.