

PANEL

Municipal Water Quality Problems and Information Needs

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The water supply program of the Environmental Improvement Division (EID) has oversight responsibility for more than 1,300 public water systems in New Mexico. Of these, 627 are community water supplies and 675 are noncommunity water supplies. Our oversight responsibility, as we see it, expands way beyond that of municipal water systems.

The majority of all the community water systems within the state serves a population of about 3,000 people or less. This accounts for 567 water systems, or 92 percent of all community water systems in New Mexico. It is interesting to note that these systems account for 98.7 percent of all monitoring recording violations of the regulations governing water supplies. They also account for 98.3 percent of all maximum contaminant level violations of the bacteriological drinking water standards. In spite of the large percentage of water systems served in the state, these supplies serve only 183,489 persons, or 15 percent of the population that is served by community water supplies. Communities in New Mexico with a population between 3,000 and 11,000 persons account for only 19 water systems, or 3.1 percent of all the community water supplies for the state. These communities account for only 1.7 percent of maximum contaminant water level violations and serve 121,000 persons, or 10 percent of the population that is served by community water supplies.

The largest communities, those that serve more than 11,000 persons, account for only 19 publicly owned community water systems. These communities endeavor to meet the drinking water standards and have a pretty good monitoring and reporting compliance record. These communities serve 618,299 persons, or 53 percent of the population which is served by community water supplies. Of these, approximately 135,000 persons are not served by public water supplies in New Mexico but instead rely on individual wells, springs, catchments or other sources. The state requires that all these communities monitor not only for the presence of bacteriological contaminants, but also for inorganic, organic and radiological contaminants.

Fifty community water systems in the state currently exceed the maximum contaminant level for fluoride. Selenium, arsenic and nitrate maximum contaminant levels are also exceeded in many of our communities throughout the state. New Mexico has elected not to enforce the fluoride standard at the present time because of the questionable health affects associated with that current standard and the economic impact that would be placed on those communities if treatment was imposed. At present, the New Mexico EID, along with other states, has requested that the U.S. Environmental Protection Agency (EPA) change the standard based on conclusive evidence by the Surgeon General, the American Medical Association, the American Dental Association, and recently the Drinking Water Advisory Council. The remaining inorganic contaminants are currently being addressed to a schedule of compliance for those communities that are currently affected.

Communities serving more than 10,000 people are also now required to monitor the presence of organic by-products that are formed when chlorine reacts with decaying organics present in the surface water supply, and in some instances, the ground water supply. This by-product, known as trihalomethane, is now monitored to determine baseline data and to assess the changes that may be necessary in the communities' water treatment process. A state proposal has been initiated for additional monitoring within the next year to identify organic by-products in community water supplies. The division is proceeding with this additional monitoring because of the health effects and maintenance problems associated with corrosive by-products. Also proposed in the near future is a statewide sampling program for synthetic organics in community water supplies. This sampling program will be necessary in view of the recent studies conducted by EPA that show that these organics are present in the majority of water supplies. Currently, the health effects associated with this organic are questionable and, in some cases, unknown, as in the case of drinking water. Extensive ongoing research may shed additional light on the subject. In the meantime, it is necessary to initiate this monitoring program so that the presence, if any, of this contaminant can be classified.

In the end, the inability to determine any given contaminant in the drinking water supply may adversely affect the public health. We believe that with ongoing training processes, communities across the state will be able to react in an informed and timely fashion. In relation to a point raised by Delfin Lovato a few minutes ago, I'd like to say that the state does not have any oversight responsibility over water supplies that

are in the Indian reservations. However, we are available to help any of the Indian communities with technical assistance in any applicable water supply if they should so request that.