

March 9, 2011

Mark Foree  
General Manager  
Truckee Meadows Water Authority  
1355 Capital Blvd  
Reno, NV 89502

Via email and FedEx

**Subject:** Tap water quality in Reno, Nevada (Truckee Meadows Water Authority)

Dear Mr. Foree:

Thank you for your comments about the quality of drinking water the Truckee Meadows Water Authority provides to Reno residents.

The Environmental Working Group's tap water quality database shows that the U.S. Environmental Protection Agency has recorded no violations of drinking water regulations for the Truckee Meadows Water Authority (<http://www.ewg.org/tap-water/whatsinyourwater/NV/Truckee-Meadows-Water-Authority/0000190/>). We congratulate the utility for its long-standing compliance with state and federal drinking water standards. However, information Truckee Meadows has disclosed to the state and to its customers highlights the same water-quality issues reflected in EWG's tap water quality database. The water quality data EWG publishes are derived from test results Truckee Meadows has provided to the Nevada Division of Environmental Protection, supplemented by additional test results published in the utility's annual water quality report.

– **Arsenic** – It appears that some neighborhoods served by Truckee Meadows receive water contaminated with relatively high levels of arsenic. Truckee Meadows' "Water Quality Lookup" database ([http://tmh2o.com/water\\_system/quality/lookup](http://tmh2o.com/water_system/quality/lookup)) allows customers to see area-specific test results. For example, residents in the Central Reno/Sparks area can see that they are drinking nearly 6 times more arsenic than their neighbors in Northwest Reno (an average of 3.85 micrograms per liter [ug/L] versus 0.66 ug/L).

We agree with Truckee Meadows' decision to give residents area-specific water quality information, rather than a system-wide average that does not reflect what individuals are actually drinking. Since the utility breaks down its contaminant testing by neighborhood, we do not understand why you advise us to publish only a system-wide average. Certainly, Reno residents drinking higher amounts of arsenic than the system-wide average deserve to know.

Arsenic is a known human carcinogen, linked to skin, bladder and lung cancer as well as other health problems. The U.S. Environmental Protection Agency's ideal, known as the Maximum Contaminant Level Goal, or MCLG, for arsenic in drinking water is zero. The EPA set its legal

limit, technically, Maximum Contaminant Level, or MCL, higher to take into account high water treatment costs for reducing arsenic contamination. That legal limit translates to a 1-in-300 lifetime risk for bladder and lung cancer, according to the National Academy of Sciences, the nation's premier scientific advisory body (NAS. 2001 Update: *Arsenic in Drinking Water*. National Academies Press).

Truckee Meadows' customers undoubtedly appreciate neighborhood-specific data. We urge you to expand your disclosures by publishing area-specific information on peak arsenic levels recorded during the year, because short-term spikes could be a concern for pregnant women, young children and other vulnerable people. It is particularly important that pregnant women and parents of young children have access in real time to accurate information about water contamination.

– **Perchloroethylene (PCE)** – On its website, Truckee Meadows alerts customers to contamination with perchloroethylene, an industrial solvent, in ground water that is a source for some neighborhoods' drinking water. The notice attributes this contamination to pollution from “hundreds of businesses in the central Reno area including dry cleaners, paint stores and auto repair shops [that] have used PCE” ([http://www.tmh2o.com/water\\_system/quality/news/pce/](http://www.tmh2o.com/water_system/quality/news/pce/)).

Truckee Meadows' comments to EWG say that all wells are treated to non-detect levels, meaning, close to zero, before water is served to customers. But the utility's 2010 water quality report discloses test results of drinking water with PCE contamination as high as 2.91 micrograms per liter, clearly above detection limits. If particular neighborhoods are drinking PCE-contaminated water, we recommend that Truckee Meadows publish area-specific information, similar to its practice for arsenic contamination.

Perchloroethylene is linked to cancer and liver problems, according to the EPA. The agency's health-based goal for the compound is zero, but the legal limit is 5 micrograms per liter, higher than the ideal due to high contaminant removal costs.

– **Disinfection byproducts** – EWG's tap water database and Truckee Meadows' annual water quality report show relatively high levels of disinfection byproducts in Reno water. These compounds are formed when disinfecting chemicals added at a treatment facility react with residual pollution in the treated water. They have been linked to cancer and nervous system and liver disorders, according to EPA. While Reno residents can reduce their exposure to these toxic chemicals with inexpensive home filters, the best long-term solution is protecting drinking water sources from pollution in the first place, as Truckee Meadows advocates in its annual water quality report.

Additional responses to Truckee Meadows' comments:

- EWG compares arsenic tests to EPA's current legal limit in drinking water, 10 micrograms per liter (ug/L). Prior to 2006 EPA's legal limit was 50 micrograms per liter. The agency lowered the arsenic limit in 2006, to better protect the public from arsenic-induced cancer. The utility suggests that its water be rated under the looser, pre-2006

regulation. We find this suggestion inexplicable given the current law and well-established science.

- Of the more than 2,000 tests of Truckee Meadows water that appear in EWG's tap water quality database, Truckee Meadows' letter notes that 5 tests for manganese may be inaccurate. If the utility provides us with the test results in question, we can make any necessary corrections. We would also recommend that the utility notify the Nevada Division of Environmental Protection, the source of the manganese test data in EWG's database. We believe it is reasonable to expect EPA and state agencies to maintain complete and accurate records of water quality tests.
- Truckee Meadows' letter says that 12 water quality tests EWG received as part of the Nevada state database, came from wells that the utility was not using as drinking water sources when tests detected spikes of contamination. Such tests in EWG's database can reflect contamination just before a well was shut down. The state database did not indicate whether the wells in Reno were taken offline because of contamination spikes or for other reasons. In general, well contamination reflects pervasive issues of source-water pollution with which utilities across the country struggle. Pollution in any well that may be used for water supplies is a concern for customers and utilities alike.
- Truckee Meadows' letter says that some individual water quality tests appear in EWG's tap water quality database multiple times. Tests shown in EWG's database are from the Nevada state database. Tests that may appear multiple times do not affect city ratings in EWG's tap water database because the calculations underpinning the ratings filter out multiple entries.

Truckee Meadows is not alone in its struggle to produce high quality tap water from polluted source water. The nation has long neglected its source waters, which are used for its drinking water. We share Truckee Meadows' belief, expressed in its 2010 annual water quality report, that "preventing pollution is far less expensive than spending money on water treatment." EWG's research has found that water utilities spend 19 times more money treating polluted water to make it safe enough to drink than federal, state and local governments spend on projects to reduce pollution in rivers and groundwater. Until the nation's public policies on clean water are strengthened, it is no wonder that residents of Reno and other cities are drinking a complex mixture of pollutants with every glass of tap water.

More than half the contaminants detected in tap water nationwide are unregulated. We encourage Truckee Meadows to test for a wide range of unregulated contaminants in order to build a fuller picture of tap water quality in Reno.

We heartily applaud Truckee Meadows' "commitment to [provide] high quality water to our customers and... dedication to ensuring the safety of our water supplies." We look forward to following its efforts in the years ahead.

Regards,

A handwritten signature in cursive script that reads "Jane Houlihan". The signature is written in dark ink and is positioned below the word "Regards,".

Jane Houlihan, MSCE  
Senior Vice President for Research  
Environmental Working Group