Keeping an Eye on the Tap

Most of us in this country take for granted that when we turn on the faucet, good clean water will start to flow. Well, that expectation doesn’t make it automatically so. The Safe Drinking Water Act requires the EPA to review every five years at least five unregulated contaminants and determine if their presence in tap water poses a significant threat to human health and should be regulated. The EPA just issued this period’s preliminary determination, finding that one of the many contaminants it reviewed should be regulated. That contaminant is strontium. Not familiar? We weren’t either, but it’s actually an abundant, naturally occurring earth metal that was used in old cathode-ray tube TVs to keep the x-rays from giving you tumors as you watched Johnny Carson (hyperlink added for our younger or more forgetful readers). So what’s the big deal? While present in 99% of public water systems, strontium is found at levels risky to human health in 7% of those systems. The problem with strontium is that, when ingested, your body thinks it is calcium, which can lead to a calcium deficiency. This puts children, the elderly, and others with weak bones at higher risk. The comment period on this preliminary determination is open until December 19, 2014. So if you want to weigh in over your glass of warm milk, you still have time.

One contaminant that did not make the cut in the preliminary determination, but which is news in Louisiana lately, is the brain-eating amoeba found in the drinking water supply in several parishes around the state (and around the country as well). While the amoeba is very common in the environment and 17 states have had at least one deadly case over the last 50 years, a qualified, peer-reviewed health risk assessment is neither available nor in progress (although you can learn more about the amoeba itself in this peer-reviewed article just published this month). Without such a health risk assessment, the brain-eating amoeba was disqualified from the regulatory determination process. We should be clear that the brain disease caused by the amoeba is still relatively uncommon, but given the weakened state of water infrastructure in parts of America it is not far-fetched to anticipate a future health risk assessment on whether the deadly brain-eating amoeba poses sufficient risk to human health. Until then, make sure your water utility is hard at work maintaining water quality (as the Tulane Environmental Law Clinic helped do in Louisiana’s Beauregard Parish) and that...
your water utility isn’t falsifying records as has been alleged (emphasis on the alleged) in St. John the Baptist Parish. Also, maybe think twice about using your neti pot this cold and flu season.

SCOTUS to Louisiana Parishes: Talk to the Hand Cuz We Aint Hearing Your State Law Claim Against BP

Claims against BP et al., there are many. There’s the federal government pursuing claims for violations of the Clean Water Act and conducting the Natural Resources Damages Assessment under the Oil Pollution Act, not to mention the private class action suit and settlement that BP is appealing to the U.S. Supreme Court. So who can blame the 11 coastal parishes who pressed their state law claim against BP et al. for killing their wildlife as a result of the oil spill? The parishes pursued this claim all the way to the U.S. Supreme Court after the 5th Circuit upheld its dismissal on federal preemption grounds. The parishes’ dream of victory died yesterday when the Supreme Court declined their request for review. Perhaps Caddo Parish will have better luck in applying the “Wildlife Statute” to the recent oil spill up there if it chooses to file such a claim.

U.S. Getting Neck Deep in Management of Remote Waters

Coming off the heels of the creation of the Pacific Remote Islands Marine National Monument, the world’s largest protected area to date, the U.S. is looking to make an impact in another remote region of the world: the arctic. This week, the Arctic Council’s Senior Arctic Officials will meet to assess the priorities and the progress made during Canada’s two-year stint as chairman of the Council. This meeting is really in anticipation of next spring’s big meeting, where Canada will pass the gavel to the U.S., which will chair the council until 2017. The agenda for the spring meeting will include such topics as pollutants like black carbon emissions (those with soot in them that can land on ice and snow and hasten melting), marine-protected areas, oil spill and search and rescue response protocols, climate change, and the ever-looming expansion of maritime trade. In addition to the U.S. and Canada, the Council includes Denmark, Finland, Iceland, Norway, Russia, Sweden, and an aboriginal representative. The U.S. has signaled that it is ready to lead the discussion, it remains to be seen just how the issues of oversight, control, and exploitation will be resolved.

If Things Don’t Work Out in the Arctic, There’s Always Space

Because it’s always good to hedge your bets, we’re excited about the recent developments in our understanding of extraterrestrial water in our solar system. This will not be news to our regular readers. The first is the exclusive photo-shoot of ice on the planet Mercury. Despite being the closest planet to the sun, Mercury does indeed have ice. While we have known about this ice for some years, we had been unable to capture an image of the ice because it is found in the planet’s permanently shadowed craters. Scientists working to understand where this ice came from were surprised by the sharp boundaries of the formation, which indicates that it is a relatively new formation. As Dr. Nancy Chabot, one of the scientists working on the study, put it, “Understanding the age of these deposits has implications for understanding the delivery of water to all the terrestrial planets, including Earth.”

Not so fast, good doctor. Don’t rule out the “nonterrestrial” Jovian (gaseous) planets, or more specifically, their moons. A study published last week in Science magazine hypothesizes why Saturn’s moon Mimas (nicknamed the Death Star for its incredible likeness to the Star Wars space station) has an unusual wobble. The study found that the moon’s wobble is twice as big as a moon with a regular, solid structure. One possible explanation is that the moon’s core is solid but oblong. The other, more exciting, explanation is that the moon has a normal spherical core and crust but with an ocean of water in between. In our humble opinion and in the pursuit of knowledge (as the noncommercial and educational use of the attached clip demonstrates), there’s only one way to find out.

Tracing Frack Water

Though the suggestion above probably demonstrates that our grip on science is less than complete, we were excited to read that researchers at Duke University may have found a way to trace fracking flowback water in the environment. Fracking flowback is the mixture of water, chemicals, and sand used to fracture shale formations and comes back to the surface. The tracers naturally occur 1-2 miles deep, where the fracking occurs. While the tracers cannot differentiate between drill sites, it can distinguish between fracking flowback water and water produced from other oil and gas operations.