

## **Arsenic Occurrence in Drinking Water Sources on the Navajo Nation and Potential Treatment Technologies.**

S. Deb Misra, POB 339, Navajo Nation Environmental Protection Agency, Window Rock AZ 86515.

Several drinking water sources on the Navajo Nation contain elevated levels of arsenic. In this presentation, the locations of these water sources will be shown on a map and the origin of arsenic will be discussed. The Public Water Systems (PWSs) containing drinking water wells with elevated levels of arsenic must remove the arsenic from the drinking water or reduce its level to comply with the maximum concentration levels for arsenic (0.010 mg/l) permitted by federal regulations which go into effect on January 23, 2006. Currently, utilizing funds from U.S. EPA, feasibility studies for arsenic removal are underway on the Navajo Nation using several technologies. The status of these studies including their cost effectiveness as well as the economic impact of the new arsenic regulations on the PWSs will be discussed during this presentation. Finally, the speaker will discuss and invite recommendations from the experts in the audience as to what can possibly be done for residents not connected with PWSs in terms of arsenic removal.

**Biographical Narrative of Satya “Deb” Misra:** Satya “Deb” Misra, P.E., a multi-disciplinary Professional Engineer with 40 years of experience in the industry, state/local governments, and academia, is the Director of the Surface and Ground Water Protection Department under the Navajo Nation Environmental Protection Agency. He received his Bachelor of Engineering in Mining Engineering from Calcutta University, India, Master of Science in Mining Engineering from Columbia University, NY, and Master of Science in Mechanical Engineering from MIT. Deb is a member of the American Society of Civil Engineers and National Society of Professional Engineers and serves in the Federal Infrastructure Task Force.