



The Precautionary Principle & Drinking Water *Facts You Should Know*

WHAT IS NJ ENVIRONMENTAL FEDERATION'S (NJEF'S) GOAL?

- NJEF strongly recommends that the NJ Department of Environmental Protection (NJDEP) employ the precautionary principle that requires water supplies to have carbon filters under certain circumstances such as when levels of Volatile Organic Chemicals (VOC's, includes disinfectant by-products) or treated sewage are high. While both of these conditions are currently regulated to varying degrees, they are also strong indicators of additional, *unregulated* contaminants. NJDEP is considering a range of options* to begin regulating the hundreds of unregulated contaminants that threaten our drinking water.

WHY USE CARBON FILTERS?

- Unlike most water treatment techniques, carbon filters effectively reduce levels of virtually all types of organic (carbon-based) chemicals, regardless of volatility including synthetics (or SOC's such as pesticides). These chemicals make up the vast majority (the exceptions being radiological and microbial) of unregulated water contaminants.

WHO WILL PAY FOR THIS?

- NJEF believes the polluters, not taxpayers and ratepayers, should pay for installing the new filtration systems.

WHY USE SUCH PRECAUTION?

- We know from experience that Dow Chemical (formerly Union Carbide) paid to install carbon filters on the contaminated wells in Toms River. But that was only after a large number of childhood cancer cases were discovered and there was a tremendous amount of public outcry.
- NJ currently only requires testing and treatment for 91 contaminants, even though thousands of chemicals are commonly in use today and hundreds of chemicals are present in drinking water supplies throughout the state.
- A 2001 US Geological Survey (USGS) found only 29% of the 50 plus pesticides (SOC's) and only 34% of the VOC's it detected in NJ ground and surface water had established drinking water standards or guidelines.

WHAT CONTAMINANTS COULD BE IN MY DRINKING WATER?

- Using more advanced testing techniques, more recent studies* of the state's ground, surface and tapwaters have found previously undetected levels of hundreds of household, pharmaceutical and industrial by-products, including antibiotics, prescription medications for diabetes and other health problems, caffeine, antacids, codeine, pain killers, flame retardants, pesticides, detergents, fossil fuel residual, etc.
- Many of these contaminants were tentatively identified compounds (TICs) for which there are no regulatory standards or testing requirements. TICs were identified in virtually all tests run for organic compounds.
- Most water samples contained more than one organic contaminant. There is little or no data available about the cumulative and synergistic health effects when two or more of these pollutants are present in the same sample.
- NJDEP readily admits it is impossible to establish health standards for all these chemicals given fiscal and time constraints – it took 5 years and \$5 million to identify the health effects of just one TIC, styrene acrylonitrile, in Toms River wells. Further, too many of these compounds survive standard water treatment (especially SOC's) and others are introduced during water treatment (such as disinfectant by-products).

WHAT HAS NJEF ACCOMPLISHED TO DATE?

- **Since the governor's appointment of NJEF to the Drinking Water Quality Institute (DWQI), NJDEP has appropriated \$2 mill for a pilot project to install activated carbon filter on two major water supply facilities** that are likely, but not confirmed, to have unregulated contaminants and/or negative health affects. This project will give NJDEP a better understanding of how well carbon filters work. If the results are favorable, NJEF will press the NJDEP to implement this type of filtration on a broader scale.

* For more info. on NJDEP's proposal and water studies by the NJDEP, UMDNJ's Environmental and Occupational Health Sciences Institute (EOSHI), USGS, and the federal Centers for Disease Control (CDC), call NJDEP's Eileen Murphy at 609-984-6070 or NJEF at 732-280-8988 or go to <http://www.nj.gov/dep/rules/ipr.html> or http://www.nj.gov/dep/rules/ipr/ipr2004_0202sdw_paper.pdf