

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WSG 170

Date Signed: October 23, 2003

MEMORANDUM

SUBJECT: Potable Water Heat Exchangers

FROM: Cynthia C. Dougherty, Director
Office of Ground Water and Drinking Water

TO: Water Division Directors

This letter is to update and confirm my October 1996 memo (attached) regarding the Office of Ground Water and Drinking Water's (OGWDW) long-standing policy of discouraging the use of potable water source heat pumps. Our numerous concerns, including the potential for deterioration of water quality, as documented over the last decade or more continue to stand.

Over the years, OGWDW and EPA's Office of Research and Development (ORD) have cited a variety of concerns about the use of heat pumps that return water to the distribution system, including: the potential for contamination of drinking water with metal byproducts (copper and lead), oils and refrigerators; potential for increased bacterial growth this might stimulate in the distribution system; and the potential for liability to the drinking water system should health be impaired as a result of the heat pump interconnection. Other emerging issues include potential risks to drinking water security that might arise with the establishment of cross connections between heat exchangers and potable water mains.

Although ORD has developed a test protocol, neither they nor we are aware of any new research, test results or other data that address the issues associated with the use of this heat pump technology. In the absence of satisfactory test results, our position discouraging the use of heat exchangers without significant additional study remains unchanged. We therefore advise you to maintain your vigilance as previously suggested with respect to any public health or water quality problems that develop and to communicate with your states and provide support as the need arises.

If you have any questions about our policy on heat exchangers, please call me or contact Bill Diamond, Director, Drinking Water Protection Division, Office of Ground Water and Drinking Water, at (202) 564-3751.

attachment

cc: James Taft, ASDWA