

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Roger B. Wilson
~~xxxxxxx~~ Governor • Stephen M. Mahfood, Director

DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

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FYI,
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[Handwritten signatures]

MEMORANDUM

DATE: November 20, 2000
TO: Regional Directors, WPCP Engineers
FROM: *RC* Randy Clarkson, P.E., Chief, Engineering Section, WPCP
SUBJECT: Leakage Tests for Sewer Systems

Due to the recent passage of Senate Bill 741, a conflict has arisen between the Missouri Clean Water Law and the sewer design rule 10 CSR 20-8.120(6)(H)2., which requires leakage tests on all sewer pipe and manholes. Since statutes override rules, we have to comply with the recent changes made to the Missouri Clean Water Law and not enforce some of the provisions in our sewer design rule. The section from the revised Clean Water Law that pertains to leakage tests on sewers and manholes is as follows:

“Require the prior submission of plans and specifications, or other data including the quantity and types of water contaminants, and inspect the construction of treatment facilities and sewer systems or any part thereof in connection with the issuance of such permits or approval as are required by sections 644.006 to 644.144, except that manholes and polyvinyl chloride (PVC) pipe used for gravity sewers and with a diameter no greater than twenty-seven inches shall not be required to be tested for leakage.”

As can be readily seen, we no longer require leakage tests on manholes or PVC sewer pipe up to 27 inches in diameter. The design rule still requires leakage tests on concrete, vitrified clay and other sewer pipe materials. Also, please note that the law change does not affect pressure tests on force mains.

Regulations require that all pipes, including PVC pipes, must be designed to minimize infiltration and manholes must be watertight. Since we can require consultants to certify that projects are constructed, as approved, certification that there is no leakage in excess of 200 pgd/in-dia/mile of PVC sewer pipe is appropriate. Certification that there was no visual leakage in the manholes is also needed. We should make sure that the plans and specifications require the use of an approved joint sealant (ramnek) between the joints of precast manhole sections and that any lifting holes are repaired.

The leakage test can be required by a permittee and is an option that the department can recommend as a good engineering practice.

RC:lnl