Paula Wilson

From: James Bledsoe <jbledsoe@Kellerassociates.com>
Sent: Thursday, October 27, 2011 8:43 AM
To: Paula Wilson
Subject: DEQ Water Rules -- Coments

Paula,

I had a couple minor comments on Section 552: Facility and Design Standards: Operating Criteria and Public Water Systems, under subsection (1).b.vii. regarding the pressure calculations for elevated storage calculations.

1) Peak hour low pressures assuming that both operational storage and equalization storage have been exhausted may be slightly more conservative than needed. For steady state model runs this assumption makes senses. For extended period model runs, the lowest pressure will be simulated in the model and may not correspond to the low tank level. This is because the peak hour typically does not occur at the end of the period during which a system draws water from a storage tank. For example, a City may begin to pull water from storage at midnight, see their peak hour demand at 6 am, and continue to draw upon the peaking storage until 8am when the tank begins to fill.
2) Assuming that the operational storage, equalization storage, and fire storage is exhausted for the fire flow analysis is another way of saying that maximum fire event occurs soon after the annual peak hour event. This is a conservative assumption which may be fine.

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