

Plumbing board adopts new standards

Contractors can now install rainwater harvesting and wastewater reuse systems without special permits

BY LIBBY TUCKER

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The Oregon State Plumbing Board last Friday passed new standards that will allow homeowners to install systems that reuse wastewater for flushing toilets. The board also created a statewide standard for rainwater harvesting in residential and commercial buildings.

The new ruling for alternate methods will make it easier for building owners to save water and will ultimately help the state meet its goals for energy savings and water conservation through new green building standards, said Mark Long, administrator of the state Building Codes Division, which oversees the Plumbing Board.

"We're trying to provide predictability to the green building regulatory process," said Long. "Instead of going to the city or county and saying 'Can I do this?' we want those answers to get done at the state level."

The board voted to allow single-family homes, townhouses and row houses to reclaim wastewater from indoor sources for flushing toilets and other nonpotable uses, but the new rules don't apply to

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apartments or duplexes. Commercial buildings are also exempt until BCD can get permission from the state legislature to regulate wastewater reuse systems.

The board also adopted a new statewide standard for rainwater harvesting systems on residential and commercial buildings that allows installation without a special permit.

Before Friday's ruling, homeowners and businesses desiring to install rainwater harvesting systems or wastewater conservation systems had to seek exemptions from city building codes inspectors, who evaluated projects individually and often with different standards.

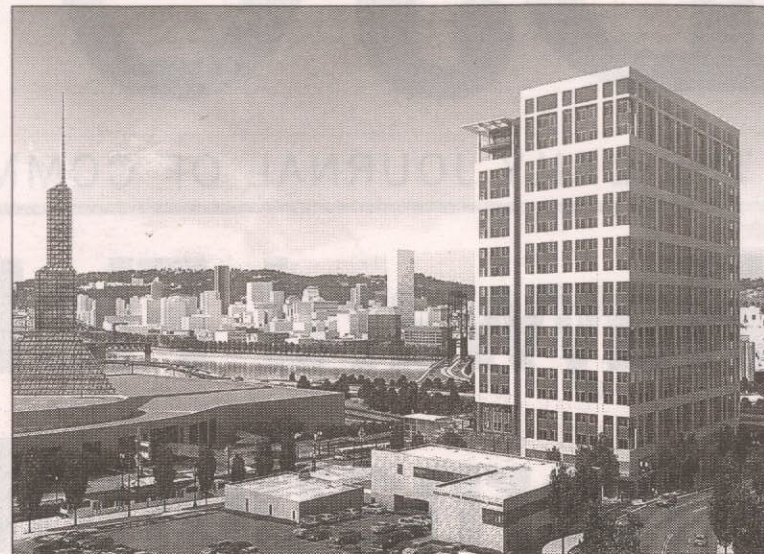
"In the past we've had to appeal this, and Portland required projects to be stamped by a licensed engineer," said Jonathan Gray, a principal with Interface Engineer-

ing and a member of the state plumbing board. "Now, with the passing of these rainwater standards, you won't have to be stamped. It becomes part of the plumbing system permit."

Ankrom Moisan Associated Architects and project consultant Interface Engineering are planning to take advantage of the new rainwater harvesting rules on their 19-story Convention Center District office tower, planned for 100 N.E. Multnomah St., to achieve a 30- to 40-percent savings on water use in the building.

The project team is working to design a system that captures 100 percent of the rainwater that falls on the building, allowing toilets to run year-round on rainwater, said Wes Ayers, a project intern for Ankrom Moisan overseeing the plumbing, electrical and mechanical systems. In the proposed design, rainwater cisterns would hold up to 300,000 gallons of water in otherwise unused space in the parking garage, he said.

The alternate methods ruling for rainwater harvesting, "just about mimics" what the city of Portland's building codes inspectors have used for over a decade, said Ken Carlson, chief plumbing



Dan Carter/DJC

Ankrom Moisan Associated Architects are designing a rainwater harvesting system for the new 19-story building at 100 N.E. Multnomah St. in Portland. The firm will take advantage of a new state ruling that allows commercial building owners to install the system while holding a standard plumbing permit.

inspector with the Portland Bureau of Development Services and chairman of the state plumbing board. Adopting the standards statewide will serve as a guide for jurisdictions that aren't as familiar with rainwater harvesting, he said.

"The big thing is the approval of the wastewater conservation systems in residential applications," said Carlson. "And it's possible that would extend to commercial as well, but right now it's kind of on a trial basis."

The plumbing board doesn't yet have the authority to regulate wastewater, which falls under multiple agencies. Next year, the BCD plans to approach legislators about a legal fix that would allow the board to set commercial standards.

Water left from a shower, for example, is regulated by the plumbing board, but 5 feet outside the building, it falls under the jurisdiction of the Oregon Department of Environmental Quality, said Ron Murray, a lobbyist for the Plumbers and Steamfitters Local 290. If outdoor water is brought back inside it's regulated by the Department of Human Services, he said, "unless you want to use it to water your lawn," and then it falls under the Construction Contractors Board.

"Everyone involved is simply not that knowledgeable about the systems and it really just needs to fall all under the plumbing board," said Murray. "That's where the legislature is going to have to get involved."

Rules to be adopted as code

The Oregon State Plumbing Board hasn't yet adopted its new rainwater reuse standards into state building codes, but the rules were nevertheless written like codes. The language will make it easier to officially adopt the rules into the commercial code when it's revised next year and into the residential code in three years, said Jonathan Gray, a member of the plumbing board.