Message

From: Pat Sinicropi [psinicropi@watereuse.org]
Sent: 3/16/2018 2:48:52 PM
To: Tracy Mehan [tmehan@awwa.org]; Amber Kim [AKim@watereuse.org]; MMeeker WERF [mmeeker@werf.org]; Pawlow, Jon [Jon.Pawlow@mail.house.gov]; Ross, David P [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=119cd8b52dd14305a84863124ad6d8a6-Ross, David]; Grevatt, Peter [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=d3caa0c39ebe44cb9d3ae44da7543733-Grevatt, Peter]; Mclain, Jennifer [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=2bc5b268184348bbb383a56b0042b603-Jennifer Mclain]; Sawyers, Andrew [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=49214552a00b4ab7b168ec0edba1d1ac-Sawyers, Andrew]
Subject: RE: For your information

Thanks Tracy – this standard will no doubt help further the ability of communities to adopt DPR, should this be the direction that works for them.

Best, Pat

From: Tracy Mehan <tmehan@awwa.org>
Sent: Friday, March 16, 2018 10:11 AM
To: Pat Sinicropi <psinicropi@watereuse.org>; Amber Kim <AKim@watereuse.org>; MMeeker WERF <mmeeker@werf.org>; Pawlow, Jon <Jon.Pawlow@mail.house.gov>; Ross, David P <ross.davidp@epa.gov>; Grevatt, Peter <Grevatt.Peter@epa.gov>; Mclain, Jennifer <Mclain.Jennifer@epa.gov>; Sawyers, Andrew <Sawyers.Andrew@epa.gov>
Subject: For your information

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New direct potable reuse standard on horizon

March 15, 2018

By Ann Espinola

As utilities in water-stressed areas throughout North America consider implementing direct potable reuse technology, AWWA is preparing to publish the industry's first-ever DPR standard.

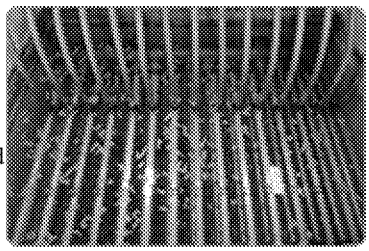
"It's a utility management standard, so it gives practices that a good utility will have in place to manage their DPR system," said Paul Olson, AWWA's senior manager of standards. "It covers the whole intake to delivery."

Most standards take three to five years to develop, but the DPR standard was considered a "high priority" of the Association and accelerated due to the membership's intense interest and the absence of federal regulations guiding the technology, Olson said. It took about two years to complete.

Publication of the *Direct Potable Reuse Program Operation and Management* standard is expected in June and will be the Association's 180th standard. For more than a century, AWWA has developed voluntary standards of minimum requirements, materials, equipment, and practices used in water treatment supply. They are used worldwide by manufacturers, distributors, and facilities to ensure the highest quality products and services.

The DPR standard was developed by a 31-member committee that included Daniel Nix, water operations manager in Wichita Falls, Texas, home to the second DPR facility in the United States. During a catastrophic drought in July 2014, Wichita Falls implemented a DPR project that ran more than a year "without a single incident or having to shut down a single time," Nix said. "It really did extend our water supply."

Nix, pictured above, said the new standard will be a game changer in how reuse is applied across North America.



"I wish I'd had this standard when we were implementing our project," Nix said. "That's one of the reasons I very quickly volunteered for the committee and was a staunch supporter of moving forward. I didn't want other reuse systems coming up behind us to experience the same issues and lack of standards we did.

"The standard sets the criteria that we believe as an industry would lead to a safe and resilient system that would prevent failure of the reuse system."

Standard details

DPR has two distinct forms:

* Advanced treated water is produced in an advanced water treatment facility and is introduced into the raw water supply immediately upstream of a drinking water treatment facility; and
* An advanced water treatment facility delivers treated water directly to a public water system's treated water conveyance or distribution system

By definition, the new standard covers DPR that is advanced treated water as part of the potable water supply without the use of an environmental buffer and with or without retention in an engineered storage buffer.

It addresses several key areas: planning for DPR, communications and outreach, management programs, source water, and operations, among others.

One of the most important recommendations for utilities, Nix said, is to develop, implement, and maintain critical control points for each treatment facility in the DPR project. A plan should be developed to monitor treatment processes, critical control points, and water quality parameters to ensure treatment goals are achieved, according to the standard.

"I think that's key and critical to this standard, that you have to do a little bit more evaluation of your processes and know where those critical control points are and be able to respond to any problems in those areas," Nix said.

In planning for DPR, a multi-barrier approach should be used in the design and selection of treatment approaches and processes, according to the standard.

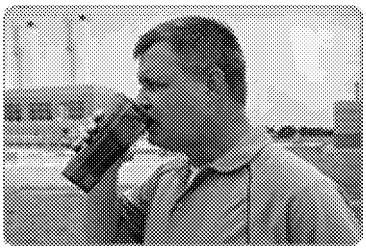
In addition, "Adequate failure response time to ensure the advanced treated water meets all water quality requirements shall be part of the design and selection of treatment approaches and processes for DPR…The inclusion of an engineered storage buffer in a treatment train for potable reuse should be considered to enhance failure response capabilities."

One section gives utilities guidance on developing a communications plan about the project and the merits of DPR. A key to success of any potable reuse program is public acceptance -- without it, decision-makers are reluctant to approve these projects.

"Key components of this program should include the purpose and need for direct potable reuse, effectively communicating the value and safety of direct potable reuse, DPR water quality, and delivering early and consistent messages," the standard reads.

The new standard is an industry consensus document and includes committee input from the water industry including the WateReuse Association and Water Environment Federation, said Dawn Flancher, AWWA's senior manager for technical and research programs.

Next steps



The draft of the standard has been approved by AWWA's Standards Council and Board of Directors, as well as the American National Standards Institute, which signifies that it meets the institute's essential requirements for openness, balance, consensus, and due process.

The DPR committee met in January at the International Symposium on Potable Reuse, Nix said, and agreed that the next step is tocreate a standard for indirect potable reuse. Olson said work on an IPR standard will begin at the Association's annual conference in June in Las Vegas.

As for the DPR standard, it ultimately achieves AWWA's mission of protecting public health, Nix said.

"This gives any municipality or water district that wants to pursue direct potable reuse a standard, so that they can say, 'I have to do A-B-C-D if I want to get to the end product,'" Nix said. "It lets them know they're doing it right."

Special thanks to Torin Halsey and the* Times Record News *in Wichita Falls for providing photos for this story.

Do you have a comment or story idea for* Connections*? Please contact Ann Espinola at aespinola@awwa.org or at 303-734-3454.

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