



# Mid-MOA

## Midwest Membrane Operator Association

### Welcome from Mid-MOA Committee Chairperson Roger Macy:

Welcome to the first update of the prospective Midwest Membrane Operator Association (Mid-MOA). This group would be affiliated with the American Membrane Technology Association (AMTA) and is in the beginning stage of development. The increase in membrane systems (RO, NF, UF, MF) in the Midwest has created a demand for operator training and information exchange. There are currently four AMTA affiliate operator organizations: in the Southeast (SEDA), South Central (SCMA), Southwest (SWMOA), and Northwest (NWMOA) United States. At this time the states considered for the Mid-MOA territory would be Kansas, Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Nebraska, North Dakota, South Dakota, and Wisconsin.

The purpose of the organization would be to provide certified training and technical information to operators and organizations that have membrane systems or are interested in learning more about membrane applications. We are looking for interested parties (operators, municipalities, industrial users, engineers, regulators, equipment suppliers, and educators) to become involved.

### Introduction to American Membrane Technology Association from Executive Director Harold Fravel:

The American Membrane Technology Association was formed over forty years ago to advance the understanding and application of membrane technology to create safe, affordable and reliable water supplies, and to treat municipal, industrial, agricultural and water waters for beneficial use.

AMTA is the primary national membrane association that advocates for membrane treatment. AMTA's membership includes utilities and end users, manufacturers, regulators, engineering firms, consultants, individuals and students. AMTA reaches out to governing and regulatory organizations to provide guidance and accurate information about membranes and their use.

AMTA strives to provide valuable information in the form of Technical Fact Sheets, a digital library of past conference presentations and papers along with a Facility Map of identified membrane sites. AMTA Affiliates provides various information exchange and training opportunities ranging from one-day workshops to multi-day tech transfer conferences, to in depth operator certification classes called MOC schools. We encourage you to visit our website for detailed information and a calendar of upcoming AMTA and Affiliate events, [www.amtaorg.com](http://www.amtaorg.com).

AMTA is enthusiastic about introducing our benefits to interested parties in the Midwest. We currently offer several opportunities to attend training and technology transfer conferences scheduled this year and next year in the Midwest. AMTA held a 2-day Regional Workshop in Minneapolis, MN in October 2017 that was attended by 72 people and included a tour of the 70 MGD Columbia Heights UF plant. In 2018, there will be a one-day workshop on September 19, 2018 in North Liberty, Iowa at their new 3 MGD RO plant to highlight membrane applications in the area. Also, in October 2019, AMTA will return to the Midwest with a two-day regional workshop in Milwaukee WI.

### Upcoming Events

- July 17-19, 2018 AMTA/NWMOA Joint Workshop, Spokane, WA
- Sept. 19, 2018 AMTA/Mid-MOA Workshop, North Liberty, IA

We urge you to attend these events and also to join AMTA so that the membrane community in the Midwest can start building a critical mass in the region to support an affiliate.



If there is interest from your organization to participate in this group, please contact the committee chairperson, Roger Macy at [roger.macy@h2oinnovations.com](mailto:roger.macy@h2oinnovations.com) or the person that provided you with this newsletter. To become active with Mid-MOA, please join AMTA.

Join AMTA



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### Project Highlights in the Mid-MOA Region

#### **Project Highlights:** Central Iowa Water Association - Waverly, Iowa

Central Iowa Water Association distributes water to 18 counties in central and northeast Iowa. Currently this plant is one of the largest RO plants in Iowa and it won the AWWA 2011 National Best Tasting Water Award. After ten years of operation this system is still operating on the original membranes and has never had to clean. It is very popular for tours and educational events.



*Built: 2008, Capacity: 3 MGD*



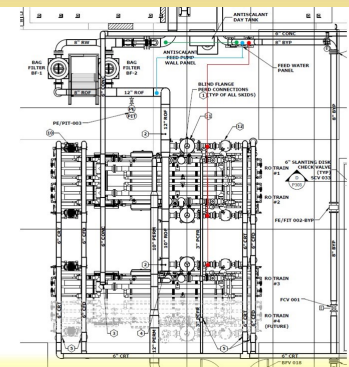
*Built: Stage 1-2012 & Stage 2-2014  
UF Capacity: 7.5 MGD, RO Capacity: 3.1 MGD*

#### **Project Highlights:** Oliver-Mercer North Dunn WTP – Zap, North Dakota

The OMND WTP is owned by the Southwest Water Authority which was established to distribute water to Southwest North Dakota. This plant treats water from Lake Sakakawea with 50% of the UF filtrate fed to a RO system to reduce hardness in the final product water. A feature of this plant is a secondary UF stage for backwash water recovery which provides an overall UF system recovery of over 99.5%.

#### **Project Highlights:** Washington, Iowa

The City of Washington, Iowa built the first Electrodialysis Reversal (EDR) plant in Iowa in the early 1980's. As the plant aged and Reverse Osmosis (RO) became more prevalent the City decided to study the application of RO on their Jordan Well water source. The pilot was successfully performed in 2015 and the conversion of the EDR plant to RO technology is currently under construction. The design incorporates an innovative layout with two skids on one frame, and the fourth spot is left empty for future expansion. The project is phased so that there will minimum operational disruption.



*Pilot Study 2015  
1.7 MGD RO Plant Under Construction 2018*