Water Jug replacement with Bottle-Less Water Dispensers

Scope
U-M purchases approximately 100,000 5-gallon water jugs annually for use in water dispensers. The use of plastic water bottles is an environmental concern. Plastic jugs are made from non-renewable fossil fuels, contributes to landfill space, and must be transported to and from a bottling facility. Bottle-less water coolers are available. These systems have the appearance of a traditional water cooler, but do not require the use of plastic bottles. Instead, tap water is plumbed directly and filter treated prior to being dispensed. The following cost-benefit analysis is provided to assist in evaluating the viability of replacing current water dispensers with bottle-less water systems. U-M has university pricing with vendors for their hot/cold water cooler systems.

<table>
<thead>
<tr>
<th>Monthly jug use</th>
<th>4</th>
<th>5</th>
<th>7</th>
<th>8</th>
<th>10</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approximate Annual Cost</td>
<td>$250</td>
<td>$295</td>
<td>$385</td>
<td>$430</td>
<td>$520</td>
<td>$740</td>
</tr>
</tbody>
</table>

Cost to Implement Bottle-less Hot/Cold Water Cooler System
Dispenser Rental costs range from $19.95 to $75.00 per month. ($239.40-$900 per year). See the vendor link above to find the unit that will work for you. Delivery, Hook-up, and Preventive Maintenance is provided at no additional charge. If your new bottle-less system will be more than a couple of feet away from your water supply, submit a work request for a copper water supply line to be installed for your new system. Plumbing estimates are $300-500 depending on the length required. The cost of water is negligible, less than $0.01/gallon at current Ann Arbor City Water prices.

Benefits and other Considerations
In addition to cost, there are usage considerations:
- Labor to replace 43 pound bottles on the cooler stand is eliminated with bottle-less cooler.
- Time spent ordering, processing inventory paperwork and delivery management is eliminated.
- Valuable floor space is no longer needed for storage of replacement bottles.
- A bottle-less water system is plumbed directly to a water source eliminating the need for plastic water jugs.
- The bottle-less system is dependent on a water source. If water service is interrupted to a building for any reason, the system will not work. The bottle-less systems may not be appropriate for locations far from existing plumbing.

Ordering a new Point of Use (POU) system:
Note: Do not add reverse osmosis
- Absopure: Refer to the procurement website information to contact Absopure. Accepts short code.
- Quench: Quench is a new vendor. Once the line is installed, submit a requisition to Gabriel Benitez gbenitez@umich.edu. Make sure to list the model number information in the line detail. The contact information should also be listed. Quench will contact the individual on the requisition for delivery and hook-up of your new system.