

**Rennaker, Joanne (DEQ)**

---

**From:** Busch, Stephen (DEQ)  
**Sent:** Thursday, August 27, 2015 8:50 AM  
**To:** Ostrander, Debbie (DEQ)  
**Subject:** RE: TTHM removal by aeration

Clearwell aeration was one of the options the City considered. The improvements they made in distribution operations and tweaks at the WTP have gone a long way. The last sample over 80 ppb was 9 months ago. They just finished replacing filter media with GAC instead of anthracite and this has had an even bigger impact removing precursors.

Waiting for sample results from the lab for August TTHM's but to give you an idea of the GAC impact, TOC removal in August was 8.5 ppm raw to 1.1 ppm treated. Prior they were removing around 40-60 %, now 87%. We expect compliance will be achieved this month.

Stephen Busch, P.E.  
MDEQ Lansing District Coordinator  
Office of Drinking Water and Municipal Assistance Lansing and Jackson District Supervisor  
517-643-2314  
[buschs@michigan.gov](mailto:buschs@michigan.gov)

-----Original Message-----

**From:** Ostrander, Debbie (DEQ)  
**Sent:** Wednesday, August 26, 2015 4:45 PM  
**To:** Busch, Stephen (DEQ)  
**Subject:** TTHM removal by aeration

Hey Steve. I just listened to a presentation on post treatment aeration techniques to remove TTHMs. It made me wonder about Flint. Has that been discussed at all for them? The professor talked about aeration in storage tanks and in in-line diffused aeration. He ended by saying they are looking for a small scale field study, which this probably wouldn't be, but if you're interested at all I can get you the slides and the presenter's contact info.

Debbie

Sent from my iPhone

**Rennaker, Joanne (DEQ)**

---

**From:** Busch, Stephen (DEQ)  
**Sent:** Monday, December 29, 2014 11:23 AM  
**To:** Prysby, Mike (DEQ)  
**Cc:** Rosenthal, Adam (DEQ); Benzie, Richard (DEQ)  
**Subject:** Re: TTHM Violation Notification

From what I see it says both section i and ii unless otherwise directed by the department in writing. I'm not sure if the dwac has some write up on this in their database. Cers could be different since it is generally used for tier iii notices. They may not be able to include in their bills by the 30 day deadline but could put in newspaper and web followed by the bill later. They will need to reissue every 3 months for a while anyway so they should prepare to mail it out.

Stephen Busch, P.E.  
 Lansing and Jackson District Supervisor  
 Office of Drinking Water and Municipal Assistance  
 MDEQ  
 517-643-2314

Sent from my iPhone

On Dec 29, 2014, at 11:09 AM, Prysby, Mike (DEQ) <[PRYSBYM@michigan.gov](mailto:PRYSBYM@michigan.gov)> wrote:

Steve,

According to R 325.10403 (3), a (i)

Community water supplies shall provide notice (Tier 2) by using both of the following forms of delivery

- (i) Mail or direct delivery to each customer receiving a bill

As far as I see in the rules ....Flint needs to send the TTHM PN via direct mail.....and is stated in the Dec. 16<sup>th</sup> Violation Notice letter.

Michael Prysby, P.E.  
 District Engineer  
 Office of Drinking Water and Municipal Assistance  
 517 290-8817

**From:** Brent Wright [<mailto:bwright@cityofflint.com>]  
**Sent:** Monday, December 29, 2014 10:58 AM  
**To:** Prysby, Mike (DEQ); Busch, Stephen (DEQ)