From:	Tim.Luther@CH2M.com
To:	Pemberton, Layne; McDonald, Scott
Cc:	tnyander@fayetteville-ar.gov; lbyke@fayetteville-ar.gov; Billy.Ammons@CH2M.com; Mayo.Miller@ch2m.com;
	Timothy.Tinsley@CH2M.com; Michelle.Strange@CH2M.com
Subject:	Permit AR0020010 AFIN 72-00781 Fayetteville Noland WRRF Plant Upset
Date:	Friday, April 22, 2016 9:27:09 PM

Mr. Pemberton,

I am providing the following update in regards to Permit AR0020010 AFIN 72-00781, The City of Fayetteville Noland WRRF located at 1400 North Fox Hunter Road, Fayetteville AR 72701, plant upset that occurred on April 11th 2016. As reported in previous notifications at 09:50 a.m. on Monday, April 11, 2016, the Noland WRRF discharge was stopped due to foam. At times, the Noland WRRF experiences foam events and discharged is stopped; typically, the system recovers in a few hours and discharge is resumed. However, this foam event appears to be a result of an influent nitrification inhibition and plant discharge was stopped. We immediately took steps to reseed the Noland return activated sludge with the return activated sludge of the Fayetteville West Side WRRF. This reseeding effort resulted in a 50% ammonia removal improvement. Over the next three days that initial improvement was not enough to maintain adequate nitrification. We resumed our reseeding efforts with the West Side WRRF return activated sludge on April 15th and continued that effort until Friday April 22nd. This latest reseeding has resulted in a vast improvement in the plants ability to nitrify and we plan to resume discharge as early as Sunday April 24th.

As mentioned in the original notification, the Noland WRRF discharge was originally stopped due to foam. At the time discharge was stopped all permit required samples were collected prior to stopping discharge, except for dissolved oxygen. The meter required for the permitted dissolved oxygen analysis was being utilized at the other Fayetteville WRRF location and was not available for another hour. Of course we did not wait for the meter to return and we stopped discharge to protect the environment. By not being able to resume discharge as expected, we were unable to collect the dissolved oxygen permit sample. To prevent this from happening in the future we will purchase another dissolved oxygen meter to have a separate meter for each WRRF. Our oxygen saturation estimate at the time of stopping discharge would be double of our permit limit of 8.7 mg/L and had no negative impact on the receiving stream.

The cause of the initial inhibition could not be determined. We sent a sample of the influent collected on April 11th and April 12th for metals and priority pollutant testing. The test results showed that all constituents tested were in acceptable range.

Any further questions can be referred to Tim Luther at 479-443-3292.

Tim Luther Operations Manager CH2M HILL Tel 479.443.3292 Fax 479.443.5613

From: Pemberton, Layne [mailto:PEMBERTON@adeq.state.ar.us]

Sent: Tuesday, April 19, 2016 8:32 AM
To: Miller, Mayo/Fay <Mayo.Miller@ch2m.com>
Cc: McDonald, Scott <mcdonald@adeq.state.ar.us>
Subject: FW: AR0020010 AFIN-72-00781 Fayetteville Treated Effluent Leak stopped Noland WWTP
Importance: High

Mr. Miller,

The missed DO sample will need to be reported as NODI=E, Analysis Not Conducted /No Sample. When submitting the Non-compliance report for that period provide a detailed description of the circumstances surrounding the missed sample. This email will be copied to my supervisor and routed to our ICIS personnel for input.

Scott, Please route to Dave Ramsey for his input on the matter.

Thank you,

Layne Pemberton Enforcement Analyst ADEQ Water Division Enforcement Branch Phone: 501-682-0664 Fax: 501-682-0880 pemberton@adeq.state.ar.us



From: Mayo.Miller@ch2m.com [mailto:Mayo.Miller@ch2m.com] Sent: Monday, April 18, 2016 10:09 PM To: Pemberton, Layne Cc: tnyander@fayetteville-ar.gov; Ihyke@fayetteville-ar.gov; Billy.Ammons@CH2M.com; Tim.Luther@CH2M.com Subject: RE: AR0020010 AFIN-72-00781 Fayetteville Treated Effluent Leak stopped Noland WWTP

Mr. Pemberton,

The Noland WRRF reseeding last week was not sufficient to allow us to resume plant discharge. This week we will resume our reseeding efforts with the West Side WRRF return activated sludge. We will notify you as soon as we are able to resume discharge.

As mentioned in the original notification, the Noland WRRF discharge was originally stopped due to foam. At the time discharge was stopped all permit required samples were collected prior to stopping discharge, except for dissolved oxygen. The meter required for the permitted dissolved oxygen analysis was being utilized at the other Fayetteville WRRF location and was not available for another hour. Of course we did not wait for the meter to return and we stopped discharge to protect the environment. By not being able to resume discharge as expected, we were unable to collect the dissolved oxygen permit sample. Will ADEQ require us to report this as a sampling frequency violation? The Noland permit requires effluent samples to be collected each week for dissolved oxygen, total suspended solids, fecal coliform, CBOD, pH, and phosphorus. We routinely do not sample the first day of the week, Sunday, because the low flow and loadings are not representative of the normal plant flows and loadings. Because of this practice, we discharged on a day (Sunday) when effluent samples could have been collected and were not. We would hope that we would not be required to report these as sampling frequency violations as well as the dissolved oxygen sample. Please advise.

Mayo Miller C 435 690 1955

CH2M

From: Pemberton, Layne [mailto:PEMBERTON@adeq.state.ar.us]
Sent: Monday, April 18, 2016 9:22 AM
To: Miller, Mayo/Fay <<u>Mayo.Miller@ch2m.com</u>>
Cc: tnyander@fayetteville-ar.gov; lhyke@fayetteville-ar.gov; Ammons, Billy/FAE
<<u>Billy.Ammons@CH2M.com</u>>; Luther, Tim/FAY <<u>Tim.Luther@CH2M.com</u>>
Subject: RE:AR0020010 AFIN-72-00781 Fayetteville Treated Effluent Leak stopped Noland WWTP

Mr. Miller, Thank you for the update.

Thank you,

Layne Pemberton Enforcement Analyst ADEQ Water Division Enforcement Branch Phone: 501-682-0664 Fax: 501-682-0880 pemberton@adeq.state.ar.us



From: <u>Mayo.Miller@ch2m.com</u> [<u>mailto:Mayo.Miller@ch2m.com</u>] Sent: Friday, April 15, 2016 7:10 PM To: Pemberton, Layne Cc: <u>tnyander@fayetteville-ar.gov</u>; <u>lhyke@fayetteville-ar.gov</u>; <u>Billy.Ammons@CH2M.com</u>; <u>Tim.Luther@CH2M.com</u> Subject: NPDES Permit AR0020010 AFIN-72-00781

Mr. Pemberton,

At 09:50 a.m. on Monday, April 11, 2016, the Noland WRRF discharge was stopped due to foam. At times, the Noland WRRF experiences foam events and discharged is stopped; typically, the system recovers in a few hours and discharge is resumed. However, this foam event appears to be a result of an influent nitrification inhibition and plant discharge has not resumed. We have taken steps to reseed the Noland return activated sludge with the return activated sludge of the Fayetteville West Side WRRF. This reseeding effort has resulted in a 50% ammonia removal improvement. We will update you Monday on plant nitrification status.

Thank you for your time! Have a good weekend!

Mayo Miller Project Manager D 479 443 3292 F 479 443 5613 M 435 690 1955

CH2M 1400 N Fox Hunter Road Fayetteville, AR 72701 www.ch2m.com | LinkedIn | Twitter | Facebook