

Direct Potable Water Reuse Standard Operating Procedure

Wichita Falls, Texas

Point of Entry Nitrate Sampling Procedure

This SOP supersedes any previous SOP on this topic.

INTRODUCTION

Nitrate is a potential concern due to the possibility of the RRWWTP effluent containing higher than normal nitrate levels. Samples must be collected on a regular basis to ensure nitrate concentrations in the finished water are below the maximum contaminant level.

OBJECTIVE

To provide the frequency and procedure for nitrate sampling point of entry.

PROCEDURE

The point of entry (TCEQ-42J) will be sampled weekly by the Laboratory Staff for nitrate testing.

- The laboratory personnel will collect the weekly sample at the high service pumps.
- Samples are to be collected in 120 mL brown plastic bottles.
- Each sample needs to have the date, time of sample and location of sample (POE).
- Samples are then to be tested by laboratory personnel on the ion chromatograph.
- Results are to be recorded on the "CWFTX - FSO TCEQ-42J Nitrate" log form (attached).

The nitrate concentration must be less than 10.0 mg/L.

If any concentration is greater than or equal to 9.5 mg/L, the laboratory personnel will notify the Operations and Maintenance Supervisor.

- The Operations and Maintenance Supervisor must notify the plant operators to take the high service discharge pumps out of service (See Alarms and Triggers SOP).
- The Laboratory Staff must collect a feed water sample from the 2010 for nitrate testing.
 - Laboratory Staff will check the online continuous nitrate monitor at the 2010 clearwell.
- Laboratory Staff will also collect samples on the raw water from the Secondary Reservoir and the RO permeate lagoon return to find which source may be the contributing factor.

See Associated SOP:

Alarms and Triggers SOP

EPA 300.0 SOP

Prepared by: Blain Ramon Date: 6/26/14

Approved by: [Signature] Date: 6/26/14

*This SOP is considered effective on the date it is approved. SOP's are to be reviewed and/or updated annually or any time this process has changed.

Reviewed by: _____ Date: _____

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Reviewed by: _____ Date: _____

Sign below and date that you have read this SOP. By signing you are stating that you understand and will defer to this SOP when applicable.

Printed Name	Signature	Date	Printed Name	Signature	Date
Andrew Adams	[Signature]	06/26/14			

CWFTX - FSO
TCEQ 42J - Nitrate (ppm)

Month:

	Date:	Nitrate	Multiply X 0.226	Nitrate - N
1			X 0.226	
2			X 0.226	
3			X 0.226	
4			X 0.226	
5			X 0.226	
6			X 0.226	
7			X 0.226	
8			X 0.226	
9			X 0.226	
10			X 0.226	
11			X 0.226	
12			X 0.226	
13			X 0.226	
14			X 0.226	
15			X 0.226	
16			X 0.226	
17			X 0.226	
18			X 0.226	
19			X 0.226	
20			X 0.226	
21			X 0.226	
22			X 0.226	
23			X 0.226	
24			X 0.226	
25			X 0.226	
26			X 0.226	
27			X 0.226	
28			X 0.226	
29			X 0.226	
30			X 0.226	
31			X 0.226	