

Direct Potable Water Reuse Standard Operating Procedure

Wichita Falls, Texas

Monochloramine residual below 1.0 mg/l water >16°C

**Monochloramine residual below 1.5 mg/l water < 16°C at 2J
WW-07**

This SOP supersedes any previous SOP on this topic. Effective on the date signed approved below

INTRODUCTION

This is the Standard Operating Procedures for responding to low MonoChloramine disinfection.

OBJECTIVE

The objective of this document is to maintain minimum disinfection levels in the transmitted water to Cypress WTP

There are two scenarios involded.

- 1) Chlorine Contact Basin water temperature => 60 °F. 16°C
 - In the event that the Monochloramine residual entering the pumping to Cypress WTP is less than 1.0mg/L.
 - The Cypress WTP will be notified immediately. The Chlorine residual and the duration of the low residual will be reported to the Cypress WTP plant.
 - Cypress WTP will monitor the Chlorine residual at the receiving end of the pipe and make the determination of the need for a shutdown.
- 2) Chlorine Contact Basin water temperature < 60 °F. 16°C
 - In the event that the Monochloramine residual entering the pumping to Cypress WTP is less than 1.5mg/L.
 - The Cypress WTP will be notified immediately. The Chlorine residual and the duration of the low residual will be reported to the Cypress WTP plant.
 - Cypress WTP will monitor the Chlorine residual at the receiving end of the pipe and make the determination of the need for a shutdown.

The River Road WWTP will make immediate adjustments to bring the MonoChloramine residual up to acceptable limits.

- This will include titrating by Amperometric titration for MonoChloramine.
- Testing for Available Ammonia before Chlorination.
- Ensuring the Ammonia level is adequate to meet MonoChloramine production.
- Adjusting the Chlorine feed rate to produce the appropriate amount of MonoChloramine.
- If using Liquid Ammonia Sulfate that the pump and settings are correct.

Related SOP: Monochloramine residual and LAS DPR SOP, RIVER ROAD SHUTDOWN
COMMUNICATION PROTOCOL and Chlorine species titration and Standardize Chlorine Titration
and QAQC Graphing DPR SOP

Monochloramine residual below 1.0 mg/l water >16°C
Monochloramine residual below 1.5 mg/l water < 16°C at 2J
WW-07

Prepared By: Bill Thornton

Prepared Date: 6-16-14

Approved by: Harold Burns

Approved Date: 6/16/14

Reviewed by: _____

Reviewed Date: _____

Reviewed by: _____

Reviewed Date: _____

Reviewed by: _____

Reviewed Date: _____

*SOP's are to be reviewed and/or updated annually or any time this process has changed.

Sign below and date that you have received, read, and understand this SOP.

Name	Signature	date	Signature	date
Johnny Ray Chavez	<u>Johnny Ray Chavez</u>	<u>6-17-14</u>	Paul Kendrick	<u>6-19-14</u>
Diana Graham	<u>Diana Graham</u>	<u>6-17-14</u>	Paul Carr	<u>6-20-14</u>
KATHARINE DEMAES	<u>Katharine Dmaes</u>	<u>6-17-14</u>	Jessie Martin	<u>6-21-14</u>
DAMON HALPER	<u>Damon Halper</u>	<u>6/17/14</u>		
JAN FOL	<u>JF</u>	<u>6/18/14</u>		
Drville McIlhanna Jr.	<u>Drville McIlhanna Jr.</u>	<u>6-18-14</u>		
DAVID SOULLIERE	<u>David Soulliere</u>	<u>6/19/14</u>		