CITY OF
Siloam Springs
It's a natural

October 8, 2015

Richard C. Healey
Enforcement Branch Manager
Water Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Via Overnight Delivery and Electronic Mail

Re: Supplemental Notification of Upset; NPDES Permit Number AR0020273

Dear Mr. Healey:

This letter is to provide information to supplement the City of Siloam Springs' prior verbal and written notices concerning the September 28, 2015 upset of the City Publicly-Owned Treatment Works (POTW). On September 29, 2015 the City's Wastewater Superintendent Tom Myers verbally notified Allison West of ADEQ that the City POTW was in upset conditions. At approximately 4:00pm on September 29, 2015 Mr. Myers notified Alan Anderson and Miles Johnson of ADEQ of an upset of the City's POTW. Mr. Myers telephoned Ms. West on October 1, 2015 at approximately 8:15am and 2:00pm with additional information regarding the upset. At my request, Mr. Myers provided email submissions to ADEQ as information became available concerning the upset. The email submissions are attached to this letter.

To confirm and supplement the information in the prior submittals, the NPDES noncompliance resulting from the upset was discharge of BOD, TSS, phosphorus and dissolved oxygen that did not meet NPDES permit effluent limitations. Attached is the laboratory analysis for a flow proportional composite sample of POTW effluent taken on September 29-30 showing the permit excursions. Also attached is a log recording effluent dissolved oxygen levels for the period September 26 through October 7. As depicted on the dissolved oxygen log, effluent dissolved oxygen returned to compliance with NPDES requirements on October 1. Through October 1 the City determined, through process control analyses for phosphorus, TSS, and COD, that POTW effluent had returned to compliance with NPDES requirements. The process control analyses logs are attached.

As we previously have notified ADEQ, the cause of the noncompliance has been determined to be excessive BOD loading at the POTW headworks. Analytical laboratory data for discharges to the POTW from Sager Creek Foods, Inc. on September 22 of 1790 mg/l, September 23 of 1746 mg/l and September 24 of 1913 mg/l demonstrate the high BOD loadings. The attached emails contain more information regarding the headworks loading. Please note that the attached October 1, 2015 email to Mr. Anderson and Mr. Johnson references Sager Creek Foods BOD loading of 2,411 which is a BOD value for the Sager Creek Foods lagoon. As provided to you on October 7, the City issued a Cease and Desist Order to Sager Creek Foods providing the conditions under which Sager Creek Foods may resume discharge to the POTW and come into compliance with pretreatment requirements.

Mr. Myers' email of September 30 (attached) provides information concerning the steps that the City took to immediately reduce and eliminate the noncompliance and mitigate the upset. On September 28 the City initiated operation of BNR treatment train 1 seeding it with bacteria and beginning to divert influent to BNR treatment train 1. On September 28 the City added bacteria to BNR treatment train 3 which was in upset in order to increase microbial activity and enhance recovery time for the BNR. On September 29-30 the City diverted a portion of headworks flow to the POTW storm water storage basin to reduce loading to the BNR processes. The influent stored in the storm water basin was bled into the BNR processes over a two day period and the storm water basin again is empty.

Please contact me at (479) 238-0907 or Steve Gorszczyk, Water/Wastewater Manager, at (479) 238-0921 if you would like additional information or to discuss any aspect of the upset.

Sincerely,

Phillip Patterson

City Administrator

Steven Gorszczyk

From: Tom Myers
Sent: Wednesday, September 30, 2015 4:25 PM
To: Anderson, Alan (ANDERSON@adeq.state.ar.us); JohnsonM@adeq.state.ar.us
Cc: Steven Gorszczyk; west@adeq.state.ar.us
Subject: Plant Up Set Siloam Springs Arkansas

Alan,

This is a follow up to our conversation yesterday regarding an upset at the Siloam Springs Wastewater Facility. We have been in contact with Alison West and Matt Holden ADEQ inspector's stationed in Fayetteville. We are trying to gather recent testing data from two major industrial wastewater dischargers. Both facilities are required to test weekly for B.O.D. an numerous other parameters. The major industrial dischargers are Sager Creek Foods and Simmons Foods which have pretreatment facilities.

We are investigating the source of the upset to wastewater plant. If we can determine the source we will take appropriate action against them.

In the mean time we immediately have taken steps at the wastewater plant to recover from this major upset. Diverted flow to storm basin soon as we found the plant failure to reduce loadings. Then added 45,000 gallons of bacteria to BNR process. Increased air viability to maximum allowable dissolved oxygen to BNR system and effluent Chlorine Contact Chamber prior to plant discharge. Sampled numerous location for process control help and collected an 24 hour flow proportional sample.

We notified regional ADEQ office in Fayetteville early Tuesday and your office.

It is my goal to have more information available to send you soon as possible.

Sincerely,

Thomas A. Myers
Wastewater Superintendent
City of Siloam Springs
Ph:479-524-5623
Cell:479-228-0934
tmyers@siloamsprings.com

ETG INC.
Environmental Testing Group, Inc.

1702 East Central Avenue Suite 10
Bentonville, AR 72712
479-271-7996 phone
479-271-8394 fax

Analytical Report

10/06/15 15:43

Client:	City of Siloam Springs	Work Order:	BI50140
	PO Box 80	Project Name:	Effluent
	Siloam Springs AR, 72761	Project Number:	Effluent
Attn:	Tom Myers	Date Received:	09/30/15

Sample ID	Laboratory ID	Date and Time Sampled	Sampled By	Sample Type
Effluent	BI50140-01	09/29/15 10:00 - 09/30/15 09:00	Jack Harrison	Composite
influent	BI50140-02	09/29/15 10:00 - 09/30/15 09:00	Jack Harrison	Composite

Comments:

Samples were received into laboratory at a temperature of 4.00 °C

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at (479)271-7996. Any opinions, if expressed, are outside the scope of the laboratory's accreditation.

These results relate only to the items tested. Estimated uncertainty is available upon request. This report has been electronically signed. .Results are reported on a wet weight basis unless otherwise noted.

David D'Amico
Laboratory Director

1702 East Central Avenue Suite 10
Bentonville, AR 72712
479-271-7996 phone
479-271-8394 fax

Analytical Report

10/06/15 15:43

Client:	City of Siloam Springs	Work Order:	B150140
	PO Box 80	Project Name:	Effluent
	Siloam Springs AR, 72761	Project Number:	Effluent
Attn:	Tom Myers	Date Received:	09/30/15

Environmental Testing Group

Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Q	Units	PQL	Dil Factor	Analyzed Date/Time	Analyst	Method	Batch
BI50140-01 (Water) Sampled: 09/30/15 09:00				**Client Sample Name: Effluent**					
Ammonia as N	0.272		mg/L	0.250	2.5	10/05/15 15:51	JCH	EPA 350.1	B5J0502
Carbonaceous BOD	37.0	G	"	1.00	1	09/30/15 14:30	JCH	SM 5210B CBOD	B5I3003
Nitrate Nitrogen	ND		"	0.200	"	10/02/15 16:52	JCH	[CALC]	[CALC]
Nitrate/Nitrite as N	ND		"	0.100	"	"	JCH	EPA 353.2	B5J0203
Nitrite as N	0.0487	J	"	0.100	"	09/30/15 22:20	JCH	"	B5I3008
Phosphorus, Total as P	1.73		"	0.0500	"	10/06/15 14:46	JCH	EPA 365.1	B5J0605
Total Suspended Solids	40.8		"	1.00	"	10/01/15 15:39	JSH	USGS I-3765-85	B5J0102
BI50140-02 (Water) Sampled: 09/30/15 09:00				**Client Sample Name: influent**					
Ammonia as N	22.4		mg/L	0.500	5	10/05/15 15:51	JCH	EPA 350.1	B5J0502
Biochemical Oxygen Demand	315		"	1.00	1	09/30/15 14:30	JCH	SM 5210B	B5I3003
Nitrate Nitrogen	ND		"	0.200	"	10/02/15 16:52	JCH	[CALC]	[CALC]
Nitrate/Nitrite as N	0.102		"	0.100	"	"	JCH	EPA 353.2	B5J0203
Nitrite as N	0.0449	J	"	0.100	"	09/30/15 22:20	JCH	"	B5I3008
Phosphorus, Total as P	4.75		"	0.500	10	10/06/15 14:46	JCH	EPA 365.1	B5J0605
Total Suspended Solids	194		"	1.00	1	10/01/15 15:39	JSH	USGS I-3765-85	B5J0102

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10/06/15 15:43

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	PO Box 80	Project Name:	Effluent
	Siloam Springs AR, 72761	Project Number:	Effluent
Attn:	Tom Myers	Date Received:	09/30/15

Chemistry Parameters by APHA/EPA Methods - Quality Control

Environmental Testing Group

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5I3003 - Wet Prep										
Blank (B5I3003-BLK1)				Prepared & Analyzed: 09/30/15						
Biochemical Oxygen Demand	ND	1.00	mg/L							
Carbonaceous BOD	ND	1.00	"							
LCS (B5I3003-BS1)				Prepared & Analyzed: 09/30/15						
Biochemical Oxygen Demand	226		mg/L	198		114	84.6-115.4			
Carbonaceous BOD	220		"	198		111	84.6-115.4			
Duplicate (B5I3003-DUP1)	**Source: BI50122-01**			Prepared & Analyzed: 09/30/15						
Biochemical Oxygen Demand	289	1.00	mg/L		315			8.61	15	
Duplicate (B5I3003-DUP2)	**Source: BI50135-01**			Prepared & Analyzed: 09/30/15						
Biochemical Oxygen Demand	352	1.00	mg/L		360			2.25	15	
Batch B5I3008 - Wet Prep										
Blank (B5I3008-BLK1)				Prepared & Analyzed: 09/30/15						
Nitrite as N	ND	0.100	mg/L							
LCS (B5I3008-BS1)				Prepared & Analyzed: 09/30/15						
Nitrite as N	8.010	0.100	mg/L	8.00		100	90-110			
Matrix Spike (B5I3008-MS1)	**Source: BI50140-01**			Prepared & Analyzed: 09/30/15						
Nitrite as N	4.000	0.100	mg/L	4.00	0.04870	98.8	90-110			
Matrix Spike Dup (B5I3008-MSD1)	**Source: BI50140-01**			Prepared & Analyzed: 09/30/15						
Nitrite as N	4.020	0.100	mg/L	4.00	0.04870	99.3	90-110	0.499	3.29	

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10/06/15 15:43

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	PO Box 80	Project Name:	Effluent
	Siloam Springs AR, 72761	Project Number:	Effluent
Attn:	Tom Myers	Date Received:	09/30/15

Chemistry Parameters by APHA/EPA Methods - Quality Control

Environmental Testing Group

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5J0102 - Wet Prep										
Blank (B5J0102-BLK1)				Prepared & Analyzed: 10/01/15						
Total Suspended Solids	ND	1.00	mg/L							
Blank (B5J0102-BLK2)				Prepared & Analyzed: 10/01/15						
Total Suspended Solids	ND	1.00	mg/L							
LCS (B5J0102-BS1)				Prepared & Analyzed: 10/01/15						
Total Suspended Solids	39.3	1.00	mg/L	40.0		98.2	80-120			
LCS Dup (B5J0102-BSD1)				Prepared & Analyzed: 10/01/15						
Total Suspended Solids	39.2	1.00	mg/L	40.0		98.0	80-120	0.255	20	
Duplicate (B5J0102-DUP1)		**Source: BI50115-01**		Prepared & Analyzed: 10/01/15						
Total Suspended Solids	1190	1.00	mg/L		1260			5.71	21.9	
Duplicate (B5J0102-DUP2)		**Source: BI50124-01**		Prepared & Analyzed: 10/01/15						
Total Suspended Solids	194	1.00	mg/L		198			2.04	21.9	
Duplicate (B5J0102-DUP3)		**Source: BI50137-01**		Prepared & Analyzed: 10/01/15						
Total Suspended Solids	62.0	1.00	mg/L		58.0			6.67	21.9	
Duplicate (B5J0102-DUP4)		**Source: BJ50005-01**		Prepared & Analyzed: 10/01/15						
Total Suspended Solids	48.0	1.00	mg/L		48.0			0.00	21.9	
Batch B5J0203 - Wet Prep										
Blank (B5J0203-BLK1)				Prepared & Analyzed: 10/02/15						
Nitrate/Nitrite as N	ND	0.100	mg/L							

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Analytical Report

10/06/15 15:43

Client:	City of Siloam Springs	Work Order:	BI50140
	PO Box 80	Project Name:	Effluent
	Siloam Springs AR, 72761	Project Number:	Effluent
Attn:	Tom Myers	Date Received:	09/30/15

Chemistry Parameters by APHA/EPA Methods - Quality Control

Environmental Testing Group

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5J0203 - Wet Prep										
LCS (B5J0203-BS1)				Prepared & Analyzed: 10/02/15						
Nitrate/Nitrite as N	8.04	0.100	mg/L	8.00		100	90-110			
Matrix Spike (B5J0203-MS1)	Source: BI50129-01			Prepared & Analyzed: 10/02/15						
Nitrate/Nitrite as N	9.73	0.100	mg/L	4.00	6.06	91.7	90-110			
Matrix Spike Dup (B5J0203-MSD1)	Source: BI50129-01			Prepared & Analyzed: 10/02/15						
Nitrate/Nitrite as N	9.72	0.100	mg/L	4.00	6.06	91.5	90-110	0.103	10	
Batch B5J0502 - Wet Prep										
Blank (B5J0502-BLK1)				Prepared & Analyzed: 10/05/15						
Ammonia as N	ND	0.100	mg/L							
LCS (B5J0502-BS1)				Prepared & Analyzed: 10/05/15						
Ammonia as N	9.57	0.100	mg/L	10.0		95.7	90-110			
Matrix Spike (B5J0502-MS1)	Source: BI50140-01			Prepared & Analyzed: 10/05/15						
Ammonia as N	5.00		mg/L	5.00	0.109	97.8	90-110			
Matrix Spike (B5J0502-MS2)	Source: BJ50008-01			Prepared & Analyzed: 10/05/15						
Ammonia as N	4.81	0.100	mg/L	5.00	ND	96.2	90-110			
Matrix Spike Dup (B5J0502-MSD1)	Source: BI50140-01			Prepared & Analyzed: 10/05/15						
Ammonia as N	4.99		mg/L	5.00	0.109	97.6	90-110	0.200	10	
Matrix Spike Dup (B5J0502-MSD2)	Source: BJ50008-01			Prepared & Analyzed: 10/05/15						
Ammonia as N	4.68	0.100	mg/L	5.00	ND	93.6	90-110	2.74	10	

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Analytical Report

10/06/15 15:43

Client:	City of Siloam Springs	Work Order:	BI50140
	PO Box 80	Project Name:	Effluent
	Siloam Springs AR, 72761	Project Number:	Effluent
Attn:	Tom Myers	Date Received:	09/30/15

Chemistry Parameters by APHA/EPA Methods - Quality Control

Environmental Testing Group

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5J0605 - Wet Prep										
Blank (B5J0605-BLK1)				Prepared & Analyzed: 10/06/15						
Phosphorus, Total as P	ND	0.0500	mg/L							
LCS (B5J0605-BS1)				Prepared & Analyzed: 10/06/15						
Phosphorus, Total as P	1.07	0.0500	mg/L	1.00		107	90-110			
Matrix Spike (B5J0605-MS1)		**Source: BI50140-01**		Prepared & Analyzed: 10/06/15						
Phosphorus, Total as P	2.15	0.0500	mg/L	0.500	1.73	84.0	90-110			#
Matrix Spike (B5J0605-MS2)		**Source: BJ50008-02**		Prepared & Analyzed: 10/06/15						
Phosphorus, Total as P	0.929	0.0500	mg/L	0.500	0.433	99.2	90-110			
Matrix Spike Dup (B5J0605-MSD1)		**Source: BI50140-01**		Prepared & Analyzed: 10/06/15						
Phosphorus, Total as P	2.20	0.0500	mg/L	0.500	1.73	94.0	90-110	2.30	6.01	
Matrix Spike Dup (B5J0605-MSD2)		**Source: BJ50008-02**		Prepared & Analyzed: 10/06/15						
Phosphorus, Total as P	0.931	0.0500	mg/L	0.500	0.433	99.6	90-110	0.215	6.01	

Notes and Definitions

J	Estimated Value. Compound was detected below minimum quantitation levels.
G	Estimated Value. Value was greater than reported result.
#	Recovery outside Laboratory historical or method prescribed limits.

ND	Analyte NOT DETECTED at PQL	ug/L	Micrograms/Liter (PPB)
PQL	Practical Quantitation Limit	ug/Kg	Micrograms/Kilogram (PPB)
mg/L	Milligrams/Liter (PPM)	dry	Sample results reported on a dry weight basis
mg/Kg	Milligrams/Kilogram (PPM)		

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Bentonville, AR 72712
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Analytical Report

10/06/15 15:43

Client:	City of Siloam Springs	Work Order:	BI50140
	PO Box 80	Project Name:	Effluent
	Siloam Springs AR, 72761	Project Number:	Effluent
Attn:	Tom Myers	Date Received:	09/30/15

CERTIFICATIONS

Certified Analyses included in this Report

Analysis	Certifications
EPA 350.1	ADEQ,TNI
Ammonia as N	ADEQ,TNI
EPA 353.2	ADEQ,TNI
Nitrate/Nitrite as N	ADEQ,TNI
Nitrite as N	ADEQ,TNI
EPA 365.1	ADEQ,TNI
Phosphorus, Total as P	ADEQ,TNI
SM 5210B	ADEQ,TNI
Biochemical Oxygen Demand	ADEQ,TNI
SM 5210B CBOD	ADEQ
Carbonaceous BOD	ADEQ
USGS I-3765-85	ADEQ,TNI
Total Suspended Solids	ADEQ,TNI

The laboratory at Environmental Testing Group Inc.operates under the following certifications and accreditations:

The accredited report results were obtained in compliance with 2009 TNI standards unless otherwise noted. For a complete list of accredited analytes, please contact your project manager.

Code	Description	Number	Expires
ADEQ	State of Arkansas	04-0574/09-071-0	10/19/2015
TNI	FL DOH	E871035	06/30/2016

BI50140-01 A
Effluent
Sampled: 09/30/15 09:00
Water-. Work Order Label
City of Siloam Springs

City of Siloam Springs

975 Anderson Avenue P.O. Box 80
Siloam Springs, AR Siloam Springs, AR 72761
website: siloamsprings.com

Phone: 479-524-5623 Fax: 479-524-4653

CITY OF SILOAM SPRINGS

WATER POLLUTION CONTROL FACILITY

CHAIN OF CUSTODY

Client Information		Project Information	
Company Name:	Siloam Springs	Permit/Project #:	Weekly Testing
Address:	P.O. Box 80	Project Order #:	1001
	410 N. Broadway		
	Siloam Springs, Ar 72761	Sampler Name(s):	J Harrison
Telephone:	(479) 524-5623		
FAX:	(479) 524-4653	and Signature(s):	Jack Harrison

Sample Identification		Sample Collection				Sample Containers				Requested Parameters							
Identification	Lab Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#	CBOD	Total Suspended Solids	NH3-N	BOD	NO3	TP		
Effluent;Outfall 001	BI50140-01	9/29/15 9/30/15	1600 0900	Comp	H_2O	P	1 Qt	Refrigerated	1	X	X						
Effluent;Outfall 001		9/29/15 9/30/15	1000 0900	Comp	H_2O	P	500 ML	H_2SO_4 + Refrig	1			X		X	X		
Influent	BI50140-02	9/29/15 9/30/15	1000 0900	Comp	H_2O	P	500 ML	H_2SO_4 + Refrig	1			X		X	X		
Influent		9/29/15 9/30/15	1000 0900	Comp	H_2O	P	1 Qt	Refrigerated	1		X		X				

Relinquished By: (Signature and Printed Name) Jack Harrison	Date 9/30/15	Time 12:22	Received By: (Signature and Printed Name) OSCAR T. Cook	Date 9/30/15	Time 12:22	Custody Seals: Used? ☐ Intact? ☐
Relinquished By: (Signature and Printed Name) OSCAR T. Cook	Date 9-30-15	Time 13:35	Received By: (Signature and Printed Name) Deanna Bo	Date 9/30/15	Time 1335	Turnaround: Regular X Special ☐
Relinquished By: (Signature and Printed Name)	Date	Time	Received for Lab By: (Signature and Printed Name)	Date	Time	Were samples properly preserved: Yes X No ☐

Comments: Sampler Effluent Temp 3.4 C Start 3.2 C Stop
Sampler Influent Temp 2.9 C Start 3.6 C Stop

G:\WP50\DOC\FORMS\CHAIN.XLS Cool all samples to 4 degrees C. Chlorinated? Yes No

This Document is Page 1 of 1

COPY

SVI Testing Data

Date 9/30 Time 0957

	BNR 1	BNR 2	BNR 3	MLSS
5 Min	950		950	950
10 Min	930		920	930
15 Min	920		910	920
20 Min	—		—	—
25 Min	—		—	—
30 Min	—		—	—

pH Testing Data

2015

Date 9/30 Time 0957

BNR 1	BNR 2	BNR 3
7.33	—	7.49

Alkalinity

BNR 1	BNR 2	BNR 3
346	—	358

Date 10/1 Time 0941

	BNR 1	BNR 2	BNR 3	MLSS
5 Min	950		930	950
10 Min	930		920	930
15 Min	910		910	920
20 Min	900		900	920
25 Min	890		890	910
30 Min	880		880	900

pH Testing Data

Date 10/1 Time 0941

BNR 1	BNR 2	BNR 3
7.33	—	7.16

Alkalinity

BNR 1	BNR 2	BNR 3
282	—	260

Date 10/2 Time 0948

	BNR 1	BNR 2	BNR 3	MLSS
5 Min	960		940	930
10 Min	940		920	910
15 Min	-		-	-
20 Min	-		-	-
25 Min	-		-	-
30 Min	-		-	-

pH Testing Data

Date 10/2 Time 0948

BNR 1	BNR 2	BNR 3
7.32	—	7.22

Alkalinity

BNR 1	BNR 2	BNR 3
292	—	266

Date 10/3/15 Time 09:17

	BNR 1	BNR 2	BNR 3	MLSS
5 Min	920		920	920
10 Min	860		850	870
15 Min	820		800	810
20 Min	760		725	760
25 Min	725		680	710
30 Min	690		625	670

pH Testing Data

Date 10/3/15 Time 09:50

BNR 1	BNR 2	BNR 3
7.28	/	7.21

Alkalinity

BNR 1	BNR 2	BNR 3
566	/	584

Date 10/4/15 Time 09:30

	BNR 1	BNR 2	BNR 3	MLSS
5 Min	880		820	860
10 Min	810		710	760
15 Min	730		610	670
20 Min	670		550	600
25 Min	610		500	550
30 Min	570		450	500

pH Testing Data

Date 10-4-15 Time 09:50

BNR 1	BNR 2	BNR 3
7.03	/	272

Alkalinity

BNR 1	BNR 2	BNR 3
7.17	/	264

SVI Testing Data

Date 9-25 Time 9:30

	BNR 1	BNR 2	BNR 3	MLSS
5 Min			900	940
10 Min			870	900
15 Min			850	840
20 Min			800	780
25 Min			750	720
30 Min			700	670

Date 9-26 Time

	BNR 1	BNR 2	BNR 3	MLSS
5 Min			870	730
10 Min			780	520
15 Min			670	440
20 Min			560	380
25 Min			500	350
30 Min			440	310

Date 9-27 Time

	BNR 1	BNR 2	BNR 3	MLSS
5 Min			940	920
10 Min			900	770
15 Min			890	650
20 Min			870	570
25 Min			840	530
30 Min			850	480

Date 9/28 Time 0859

	BNR 1	BNR 2	BNR 3	MLSS
5 Min			940	910
10 Min			880	800
15 Min			850	720
20 Min			770	650
25 Min			720	600
30 Min			690	560

Date 9/29 Time 0904

	BNR 1	BNR 2	BNR 3	MLSS
5 Min	950		930	950
10 Min	920		920	920
15 Min	890		870	870
20 Min	870		790	830
25 Min	850		720	820
30 Min	800		670	800

pH Testing Data

2015

Date 9-25 Time 9:10

BNR 1	BNR 2	BNR 3
—	—	6.99

Alkalinity

BNR 1	BNR 2	BNR 3
—	—	300

pH Testing Data

Date 9-26 Time 9:25

BNR 1	BNR 2	BNR 3
—	—	6.88

Alkalinity

BNR 1	BNR 2	BNR 3
—	—	280

pH Testing Data

Date 9-27 Time

BNR 1	BNR 2	BNR 3
—	—	6.90

Alkalinity

BNR 1	BNR 2	BNR 3
—	—	260

pH Testing Data

Date 9/26 Time 0859

BNR 1	BNR 2	BNR 3
—	—	7.48

Alkalinity

BNR 1	BNR 2	BNR 3
—	—	296

pH Testing Data

Date 9/29 Time 0904

BNR 1	BNR 2	BNR 3
~~7.43~~ 7.24	—	7.43

Alkalinity

BNR 1	BNR 2	BNR 3
~~386~~ 384	—	386

SVI Testing Data

Date 9-20-15 Time 09:10

	BNR 1	BNR 2	BNR 3	MLSS
5 Min			620	620
10 Min			510	500
15 Min			450	440
20 Min			420	400
25 Min			400	370
30 Min			390	360

Date 9/21 Time 0912

	BNR 1	BNR 2	BNR 3	MLSS
5 Min			750	890
10 Min			~~580~~ 500	760
15 Min			500	650
20 Min		440	~~440~~ 400	580
25 Min			~~500~~ 400	520
30 Min			380	480

Date 9/22 Time 0908

	BNR 1	BNR 2	BNR 3	MLSS
5 Min			620	750
10 Min			510	640
15 Min			450	570
20 Min			410	500
25 Min			390	460
30 Min			370	430

Date 9/23 Time ~~08:38~~ 08:50

	BNR 1	BNR 2	BNR 3	MLSS
5 Min			700	720
10 Min			580	580
15 Min			490	500
20 Min			440	450
25 Min			420	420
30 Min			400	410

Date 9-24 Time ~~9:05~~ 8:45

	BNR 1	BNR 2	BNR 3	MLSS
5 Min			900	830
10 Min			860	880
15 Min			830	820
20 Min			770	760
25 Min			720	710
30 Min			670	670

pH Testing Data

2015

Date 9-20-15 Time 09:22

BNR 1	BNR 2	BNR 3
/	/	7.57

Alkalinity

BNR 1	BNR 2	BNR 3
/	/	300

pH Testing Data

Date 9/21 Time 0912

BNR 1	BNR 2	BNR 3
—	—	7.66

Alkalinity

BNR 1	BNR 2	BNR 3
—	—	272

pH Testing Data

Date 9/22 Time 0908

BNR 1	BNR 2	BNR 3
—	—	7.82

Alkalinity

BNR 1	BNR 2	BNR 3
—	—	372

pH Testing Data

Date 9-23 Time 08:50

BNR 1	BNR 2	BNR 3
/	/	7.77

Alkalinity

BNR 1	BNR 2	BNR 3
/	/	354

pH Testing Data

Date 9-24-15 Time 8:05

BNR 1	BNR 2	BNR 3
—	—	7.29

Alkalinity

BNR 1	BNR 2	BNR 3
—	—	320

Daily TSS Testing Data

2015

Date 9-27	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS	
Filter wt.			.1196	.1229	.1195	.1250	
Dry wt.			.1696	.1247	.1690	.1883	
Calc			.0500	.0018	.0497	.0653	
TSS			2500	90	2485	3265	

Date 9/28	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS	
Filter wt.			.1242	.1190	.1184	.1191	
Dry wt.			.1761	.1200	.1706	.1829	
Calc			.0519	.0010	.0522	.0638	
TSS			2595	50	2610	3190	

Date 9/29	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS	
Filter wt.	.1188		.1225	.1183	.1221	.1223	
Dry wt.	.1756		.1783	.1201	.1793	.2092	
Calc	.0568		.0558	.0018	.0572	.0789	
TSS	2840		2790	90	2860	3945	

Date 9/30	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS	
Filter wt.	.1212		.1234	.1195	.1238	.1217	
Dry wt.	.1861		.1814	.1207	.1851	.2139	
Calc	.0649		.0580	.0012	.0613	.0926	
TSS	3245		2900	60	3065	4630	

Date 10/1	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS	EFF
Filter wt.	.1208		.1217	.1231	.1216	.1214	.1212
Dry wt.	.1704		.1793	.1252	.1920	.2136	.1221
Calc	.0496		.0576	.0021	.0704	.0922	.0009
TSS	2480		2880	105	3520	4610	45

Date 10/2	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS	EFF
Filter wt.	.1217		.1212	.1214	.1214	.1218	.1213
Dry wt.	.1692		.1746	.1223	.1888	.2209	.1209 .1219
Calc	.0475		.0534	.0009	.0674	.0991	.0006
TSS	2375		2670	45	3370	4955	30

Date 10/3/15	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS	
Filter wt.	0.1207		0.1219	0.1206	0.1213	0.1216	
Dry wt.	0.1859		0.1798	0.1323	0.1814	0.2129	
Calc	0.0652		0.0579	0.0117	0.0601	0.0913	
TSS	3260		2895	585	3005	4565	

Dry wt. - Filter wt. X 1000 /.02 = TSS

Daily TSS Testing Data

2015

Date 9-2015	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS
Filter wt.			0.1237	0.1235	0.1215	0.1225
Dry wt.			0.2072	0.1382	0.1991	0.2849
Calc			0.0835	0.0147	0.0766	0.1624
TSS			4175	735	3830	8120

Date 9/21	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS
Filter wt.			.1236	.1211	.1245	.1221
Dry wt.			.1953	.1223	.1983	.3037
Calc			.0717	.0012	.0738	.1816
TSS			3585	60	3690	9080

Date 9/22	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS
Filter wt.			.1234	.1241	.1242	.1228
Dry wt.			.1975	.1253	.1988	.3003
Calc			.0741	.0012	.0746	.1775
TSS			3705	60	3730	8875

Date 9/23	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS
Filter wt.			0.1250	0.1252	0.1225	0.1242
Dry wt.			0.2008	0.1289	0.2015	0.2319
Calc			0.0758	0.0037	0.0790	0.1077
TSS			3790	185	3950	5385

Date 9-24	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS
Filter wt.			.1230	.1240	.1245	.1234
Dry wt.			.1987	.1262	.2009	.2427
Calc			.0757	.0022	.0764	.1193
TSS			3785	110	3820	5965

Date 9-25	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS
Filter wt.			.1222	.1197	.1242	.1238
Dry wt.			.1841	.1319	.1949	.2032
Calc			.0619	.0022	0707	.0794
TSS			3095	110	3535	3970

Date 9-26	BNR 1	BNR 2	BNR 3	INF	MLSS	Final RAS
Filter wt.			.1235	.1195	.1194	.1185
Dry wt.			.1708	.1207	.1630	.1626
Calc			.0473	.0012	.0436	.0441
TSS			2365	60	2180	2205

Dry wt. - Filter wt. X 1000 /.02 = TSS

2015

PLANT HEADWORKS DATA

Sampler Initials	Sample pH	Sample Temp F	Sample Time	Sample Date	Sample Type	Sample TSS-mg/L	Sample COD-mg/L	Sample Alkalinity
~~8-22-15~~	7.46	76.1	~~08:55~~	~~08-22-15~~	G	275	-	200
~~JM~~	6.92	73.4	~~09:56~~	~~08-23-15~~	G	480		68
JLH	7.50	73.9	0849	8/24	G	100	—	166
JLH	7.41	75.2	0822	8/25	G	55	520	168
JLH	7.39	73.9	0818	8/26	G	90	—	174
JLH	7.58	77.4	0814	8/27	G	65	—	170
~~JM~~	7.39	~~76.8~~	0728	8/28	G	115	-	120
~~HH~~	7.10	76.8	8:10	8-28	G		—	136
~~HH~~	7.41	76.9	8:00	8:10	G		—	136
JLH	7.35	76.3	0805	8/31	G	95	—	148
JLH	7.56	76.5	0810	9/1	G	70	1320	174
JLH	7.53	77.2	0804	9/2	G	45	—	142
JLH	7.42	75.9	0800	9/3	G	70	—	146
JLH	7.28	76.3	0830	9/4	G	75	—	~~168~~ 140
~~JM~~	7.20	77.0	10:03	9/5	G	495	—	124
~~JM~~	7.22	77.2	11:31	9/6	G	280	—	116
~~JM~~	7.16	77.5	10:52	9/7	G	195	-	127
JLH	7.23	75.7	0814	9/8	G	95	980	136
JLH	7.24	77.2	0850	9/9	G	85	—	128
JLH	7.31	77.0	0822	9/10	G	120	—	142
JLH	7.42	76.1	0800	9/11	G	80	—	194
~~JM~~	7.12	74.3	08:40	9/12/15	G	1140	—	118
~~JM~~	7.27	73.0	09:08	9/13/15	G	210		140
JLH	7.31	75.2	0810	9/14	G	80	—	170
JLH	7.14	78.2	0805	9/15	G	145	1530	164
JLH	7.21	76.1	0806	9/16	G	85	—	178
JLH	7.27	73.9	0812	9/17	G	70	—	180
JLH	7.29	76.3	0802	9/18	G	115	—	184
~~JM~~	7.14	76.8	08:26	9/19	G	80	—	192
~~JM~~	7.26	72.3	09:08	9/20/15	G	135	—	136
JLH	6.98	74.5	0818	9/21	G	60	—	198
JLH	6.88	74.5	0807	9/22	G	60	1920	194
~~JM~~	7.11	75.0	08:40	9/23	G	185	—	170
~~HH~~	6.40	72.1	9:40	9-24	G	110	—	180
~~HH~~	6.80	73.6	9:05	9-25	G	110		160
~~HH~~	6.60	74.8	8:20	9-26	G	60	—	200
~~HH~~	6.55	73.2	8:35	9-27	G	90	—	140
JLH	6.98	74.1	0804	9/28	G	50	—	194
JLH	7.03	74.5	0805	9/29	G	90	1540	208
JLH	7.34	73.9	0837	9/30	G	60	1150	182
JLH	~~7.87~~ 7.31	72.9	0846	10/1	G	105	1040	186
JLH	7.14	72.8	0807	10/2	G	45	—	182

DATE	Effluent Discharge		Process Control Chlorine Contact Basin Up Stream of Discharge				
	pH	D.O.	TP	NH3-N	D.O.	TSS	C.O.D.
9/26/2015	7.89						
9/27/2015							
9/28/2015			1.21		1.4		
9/29/2015		5.47	0.99	0.8			
9/30/2015	7.86	5.05	1.21	1.4			
10/1/2015	7.58	7.04	0.7	0.4		20	10
10/2/2015	8.04		1.33	1.2			
10/5/2015	7.62						
10/6/2015	7.54	7.9	0.17	0.2			
10/7/2015		7.4	0.14	0.2		15	5

Steven Gorszczyk

From: Tom Myers
Sent: Thursday, October 01, 2015 1:59 PM
To: Anderson, Alan (ANDERSON@adeq.state.ar.us); JohnsonM@adeq.state.ar.us
Cc: Steven Gorszczyk; west@adeq.state.ar.us
Subject: FW: Plant Up Set Siloam Springs Arkansas
Attachments: Sager Creek Foods Reports RE Wastewater Plant Upset.pdf

Alan,

Here attached is the data needed to show cause action against Sager Creek Foods. Their pretreatment permit allows a B.O.D. of 375 mg/l. At their flow rate of 1.3 MGD and loading at 2,411 mg/l B.O.D. listed in attached documents it would have over whelmed the plant at 26,140 lbs/day. They ranged from 19,000 plus lbs/day to us for several days before we found out and shut their discharge off. This loading caused a pass through at Siloam Springs Wastewater Facility. Their pretreatment maximum allowable loading is 4,691 lbs/day.

We are in discussion with legal counsel and will keep you advised of all actions.

Sincerely,

Thomas A. Myers
Wastewater Superintendent
City of Siloam Springs
Ph:479-524-5623
Cell:479-228-0934
tmyers@siloamsprings.com

From: Tom Myers
Sent: Wednesday, September 30, 2015 4:27 PM
To: Anderson, Alan (ANDERSON@adeq.state.ar.us); 'JohnsonM@adeq.state.ar.us'
Cc: Steven Gorszczyk; west@adeq.state.ar.us
Subject: Plant Up Set Siloam Springs Arkansas

Alan,

This is a follow up to our conversation yesterday regarding an upset at the Siloam Springs Wastewater Facility. We have been in contact with Alison West and Matt Holden ADEQ inspector's stationed in Fayetteville. We are trying to gather recent testing data from two major industrial wastewater dischargers. Both facilities are required to test weekly for B.O.D. an numerous other parameters. The major industrial dischargers are Sager Creek Foods and Simmons Foods which have pretreatment facilities.

We are investigating the source of the upset to wastewater plant. If we can determine the source we will take appropriate action against them.

In the mean time we immediately have taken steps at the wastewater plant to recover from this major upset. Diverted flow to storm basin soon as we found the plant failure to reduce loadings. Then added 45,000 gallons of bacteria to BNR process. Increased air viability to maximum allowable dissolved oxygen to BNR system and effluent Chlorine Contact Chamber prior to plant discharge. Sampled numerous location for process control help and collected an 24 hour flow proportional sample.

We notified regional ADEQ office in Fayetteville early Tuesday and your office.

It is my goal to have more information available to send you soon as possible.

Sincerely,

Thomas A. Myers
Wastewater Superintendent
City of Siloam Springs
Ph:479-524-5623
Cell:479-228-0934
tmyers@siloamsprings.com