

January 30, 2009

David Jurgens, Water and Wastewater Director City of Fayetteville – Paul R. Noland WWTP 113 W. Mountain Fayetteville, AR 72701

RE: City of Fayetteville - Paul R. Noland WWTP Suspected Collection System Release Investigation

AFIN: 72-00102 NPDES Permit No.: AR0020010

Dear Mr. Jurgens:

On January 21, 2009, while conducting an inspection at the Premiere Plaza construction site located at the intersection of West 6th Street & S. Camellia Ln., Fayetteville, I observed what appeared to be wastewater discharging into Farmington Branch from below a recently buried, encased eight-inch sewer line. The discharge was located at the point where the line exits the north bank of the creek. The discharge was steady and had a raw sewage odor. The new line is tied into the existing main on the north side of the creek, and will collect wastewater from Premiere Plaza. Premiere Plaza is located south of the creek.

I notified the City of Fayetteville that afternoon of the observed condition, and a crew was dispatched to identify the source of the apparent collection system leak. A remote-controlled camera and dye tracing were utilized along limited lengths of the main in an attempt to locate the source; however, the source was not identified. The apparent waste appears to be traveling along the base of the main from its source to the point where it discharges into the creek.

A member of the investigation crew suggested that the discharge may be ground water, however, the long period of no rainfall prior to the investigation and the odor of the discharge suggested otherwise. In addition, the discharge was occurring from the north bank of the creek only. As of January 30, 2009, the discharge was still present.

A grab sample of the discharge was taken by OMI on January 22, 2009. The January 23, 2009, analytical report indicated that the sample was negative for fecal coliform bacteria. Because this discharge is still occurring, William Winn, City of Fayetteville, informed me on January 30, 2009, that the City will perform a spot dig in the area of the discharge to obtain an additional sample for fecal coliform bacteria analysis.

David Jurgens, City of Fayetteville- Paul R. Noland WWTP January 30, 2009 Page 2

Please submit a written response with your investigation results to the Water Division Enforcement Branch of this Department at the following address:

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

This response should contain detailed documentation describing the course of action taken to confirm or refute this suspected release. If the release is confirmed, please include a summary of the repairs made to the collection system. The written response is due February 20, 2009.

If I can be of any assistance, please contact me at 479-267-0811, ext. 16.

Sincerely.

John Fazio District 1 Field Inspector Water Division

cc: Water Division Enforcement Branch Water Division Permits Branch

€EPA									Form Approved OMB No. 2040-0003		
	NPDE										
	NPDES Compliance Inspection Report Section A: National Data System Coding										
	Transaction Code NPDES Yr/Mo/Day Inspector Fac. Type										
1 N 2 5 3 A R 0 0 2 0 0 1 0 11 12 0 9 0 1 2 1 17 18 Remarks									$\mathbf{R} \qquad 19 \mathbf{S} 20 1 \qquad 1$		
	Inspection Work Days]	Facility Evaluation R	ating	BI	(QA		Reserved		
	67 69		70 N	71	Ν	72	N 73 74 75		80		
				Section I	B: Fac	ility	Data				
	ne and Location of Facility Inspected ude POTW name and NPDES permit			charging to POTW	V, also		Entry Time/Date		Permit Effective Date		
	y of Fayetteville – Paul R. Nola			ollection system 1	release	e)	1325 / 01-21-09		06-01-06		
) N. Fox Hunter Road etteville, AR						Exit Time/Date		Permit Expiration Date		
							1610 / 01-21-09		05-31-11		
	ne(s) of On-Site Representative(s)/Tr I Winn, City of Fayetteville, 479-60			iber(s)					ner Facility Data		
N		T '41 /						Dis	scharge location:		
Dav	ne, Address of Responsible Official/ id Jurgens, Water and Wastewate			ber			Contacted	36.	0495, -94.2195		
	v of Fayetteville W. Mountain										
Fay	etteville, AR 72701 -575-8330 / 479-575-8257						Yes No				
-17	515-05501 417-515-0251			tion C: Areas Ev			uring Inspection sfactory, N = Not Evaluated)				
Ν	Permit	Ν	Flow Measuremen		N		erations & Maintenance N		Sampling		
Ν	Records/Reports	Ν	Self-Monitoring P		Ν	-	dge Handling/Disposal	Ν	Pollution Prevention		
Ν	Facility Site Review	Ν	Compliance Sche		Ν		treatment	Ν	N Multimedia		
Ν	Effluent/Receiving Waters	Ν	Laboratory		Ν	Sto	rm Water	Ν	V Other: leak investigation		
	8	Se		of Findings/Com	ments	(Att	ach additional sheets if necessary	y)	8		
A reconnaissance inspection was conducted following the discovery of an apparent wastewater collection system discharge into Farmington Branch. The discharge is located on the north bank of Farmington Branch northwest of the intersection of West 6 th St. and Camellia Ln.											
	The City of Fayetteville is currently conducting an investigation to confirm or deny the release. The City is to submit to the Department the results of its investigation by February 20, 2009.										
Name(s) and Signature(s) of Inspector(s) Agency/Office/Telephone/Fax Date											
John Fazio AR Dept. of 479-267-081							tal Quality-Fayetteville 0-267-0819	January 30, 2009			
15	//										
Sig	Signature of Reviewer Agency/Office/Phone and Fax Numbers Date										

Arkansas Department of Environmental Quality (ADEQ) Official Photograph Sheet

Location: City of Fayetteville Suspected Wastewater Collection System Release									
	<u> </u>	•							
			· · · · · · · · · · · · · · · · · · ·						
Photo #	1	Of	3			01/21/09	Time:	1325	
Description				ewer line across Farm h. Tied into main nor			from Pre	emiere Plaza.	
Photograph	er:	John	Fazio		Witness:	None			
Photo #	2	Of	3		Date:	01/21/09	Time:	1336	
Description	n:	Disch	arge fro	om below encased line	e into cree	k. Note iron	-staining.		

Arkansas Department of Environmental Quality (ADEQ) Official Photograph Sheet

T 4				Official Photog					
Location: City of Fayetteville Suspected Wastewater Collection System Release									
Photographer: John			Fazio		Witness	None	T		
Photo #	3	Of	3		Date:	01/21/09	Time:	1450	
Descriptio			tained of the second se	discharge from north odor.	bank into	creek. Sedin	nent and o	lischarge has	
Photograp	her:				Witness	:			
Photo #		Of			Date:	·	Time:		
Descriptio	on:				•		•		

Message

From: Roberts, Anne Sent: Monday, March 23, 2009 10:14 AM To: 'David Jurgens' Subject: Inspection at Premiere Plaza construction site Mr. Jurgens,

We can't find your response to the attached letter from ADEQ Inspector John Fazio concerning his January 21, 2009 inspection of the referenced site. If you have already submitted the missing letter, please send a copy of it to us so we may place it on file and correct our records. If you have not submitted your response, please do so immediately.

Thanks.

Anne Roberts Enforcement Administrator Water Division Arkansas Dept. of Environmental Quality (ADEQ) 5301 Northshore Drive North Little Rock, AR 72118-5317 Telephone: (501) 682-0632 Fax: (501) 682-0910 From: Roberts, Anne Sent: Thursday, April 16, 2009 8:49 AM To: 'David Jurgens' Cc: William Winn Subject: RE: Inspection at Premiere Plaza construction site

David,

I still haven't received Fayetteville's response. Let me know if you have sent it in already. We've been having more problems than usual--which are already a lot--with our filing system for incoming mail, so it may not have come to me.

Thanks.

Anne Roberts Enforcement Administrator Water Division Arkansas Dept. of Environmental Quality (ADEQ) 5301 Northshore Drive North Little Rock, AR 72118-5317 Telephone: (501) 682-0632 Fax: (501) 682-0910

-----Original Message-----From: David Jurgens [mailto:djurgens@ci.fayetteville.ar.us] Sent: Tuesday, March 31, 2009 3:15 AM To: Roberts, Anne Subject: Re: Inspection at Premiere Plaza construction site

Anne,

I too enjoyed Thursday's meeting. We are putting both the presentation and the notebook onto a thumb drive and will send it to you in a few days. I will probably expand the notebook a small amount to reflect current training and licensing status.

I believe the response to attached letter from ADEQ Inspector John Fazio concerning his January 21, 2009 inspection of the referenced site was sumbitted while I was overseas on military duty. I do remember that lab samples confirmed what the televising and dye testing indicated- the water was not wastewater; the water in question was stagnant water that had been trapped in the encasement pipe. I will send you the letter as soon as possible. Both Tom Hubbard and Will Winn are in Camden yesterday and today for Train the Trainer instruction for water and wastewater licensing and certification training, so it may be Wednesday before I have the response.

Thank you,

David

>>> "Roberts, Anne" <ROBERTSA@adeq.state.ar.us> 3/30/2009 12:35 pm >>>

David,

See the message below. I meant to bring it up last week when you were here. Please respond ASAP.

I certainly enjoyed your informative presentation on Fayetteville's efforts to address SSOs. Anne Roberts Enforcement Administrator Water Division Arkansas Dept. of Environmental Quality (ADEQ) 5301 Northshore Drive North Little Rock, AR 72118-5317 Telephone: (501) 682-0632 Fax: (501) 682-0910

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Thanks.

Anne Roberts Enforcement Administrator Water Division Arkansas Dept. of Environmental Quality (ADEQ) 5301 Northshore Drive North Little Rock, AR 72118-5317 Telephone: (501) 682-0632 Fax: (501) 682-0910



April 23, 2009

Ms. Anne Roberts Enforcement Administrator, Water Division 5301 North Shore Drive North Little Rock, AR 72118-5317

Re: NPDES Permit AR0020010, AFIN 72-00102, Suspected Collected System Release Investigation

Dear Ms. Roberts,

The City of Fayetteville's investigation into the water entering Farmington Branch from the ditch line of a new sewer pipe indicates the water is groundwater, not wastewater. The initial release was more stagnant than would be typical because it was captured and retained in the steel encasement pipe since the pipeline was originally installed. Later flow was cleaner, typical of groundwater, but still contained the reddish color that is not uncommon in ditch water that passes through red clay soils. The ground water enters the trench line anywhere along the route where the pipeline (and other crossing utilities) is installed, and then follows the French drain of gravel surrounding the pipe. Per PVC manufacturers' recommendations, we require 6" of gravel bedding completely surrounding all PVC pipelines.

Upon receiving notification of a possible problem on the afternoon of January 21, 2009, Fayetteville supervisory and field crews responded to the site and in the presennse of Mr. Fazio of ADEQ immediately televised and dye tested the sewer main to determine if there was any failure in the pipeline. The dye never showed up in the creek; the televising did not show any pipe problems. The city followed up with additional televising and dye testing; again, no dye ever showed up in the ditch line, and the density of dye in the sewer pipe was consistent with a tight system. The attached map shows which lines were televised and dye tested within the drainage basin. On January 22, 2009, a grab sample was drawn by OMI, our wastewater treatment plant operator, and tested at the Noland WWTP lab. It was negative for fecal coliform bacteria. After a test hole was dug, an additional grab sample was taken on February 24, 2009. Again, the sampling indicated no signs of wastewater. Copies of these samples are attached as are photos taken in April. Further observation over the next few months indicated that the original hypothesis was correct in that the water coming from the pipe encasement was ground water and not wastewater.

Please contact me at 479-575-8330 or djurgens@ci.fayetteville.ar.us if you have any questions.

Sincerely,

City of Fayetteville

David Jurgens, P. E. Utilities Director

Enclosure

Cc: John Fazio





North End of Encasement Where Groundwater is Appearing Photo Taken 21 April, 2009



Close Up of Above Photo



Close Up of North End of Encasement Looking Down Where Groundwater is Appearing Photo Taken 21 April, 2009



North End of Encasement Where Groundwater is Appearing Photo Taken 21 April, 2009



Looking Southeast from North Shore Photo Taken 21 April, 2009



Looking Southeast from North Shore Photo Taken 21 April, 2009



Looking West Along Existing Line The Test Hole is on the left side of the photo where the greener grass is located No dye showed up in the test hole Photo Taken 21 April, 2009



QA/QC REPORT

Date of report: 01/23/09

Batch #: Pipe casing/creek crossing

Spike/Std								
Parameter	Blank	Unit	Ref.Value	Recovery	Duplicate			
F. coliform	0	cfu	na	na	1	2		

Certified by: Bruce Richart, Lab Director

012309 Date:

REMARKS: 1. Blank, Duplicate, Spike (where applicable) or Internal Standard are performed at least 10% per batch.

2. QC measurements are performed on random samples.

3. QC data are within control limits.

FAYETTEVILLE PROJECT 1400 North Fox Hunter Road Fayetteville, Arkansas 72701 479-443-3292 Fax 479-443-5613 Corporate Headquarters 9193 S. Jamaica Street, Suite 400 Englewood, CO 80112 303-740-0019 Fax 303-740-7061



ANALYTICAL REPORT

Parameter Fecal Coliform	Result	Unit	Date Analyzed	Method SM 9222D	Analyst DM/BR	
		1114			A	
Sample Type	Grab		Received By:	BR		
Sample Date	: 01/22/09		D/T Received:	01/22/09 / 1151	l	
Lab ID #	: 09-0090					
Sample Source	pipe casing leak		Collected By:	BR		
			D/T Collected:	01/22/09 / 1113	3	
Project	: Fayetteville			6th & Camelia		
	: William Winn		File ID:	Creek pipe crossing		
Date of Report						

Certified by: Bruce Richart, Lab Director

Date: 012309

FAYETTEVILLE PROJECT 1400 North Fox Hunter Road Fayetteville, Arkansas 72701 479-443-3292 Fax 479-443-5813 Corporate Headquarters 9193 S. Jamaica Street, Suite 400 Englewood, CO 80112 303-740-0019 Fax 303-740-7061



QA/QC REPORT

Date of report: 02/25/09

Batch #: Pipe casing/creek crossing

Spike/Std								
Parameter	Blank	Unit	Ref.Value	Recovery	Duplicate			
F. coliform	0	cfu	na	na	72	89		

Certified by: _, Bruce Richart, Lab Director

022509 Date:

REMARKS: 1. Blank, Duplicate, Spike (where applicable) or Internal

Standard are performed at least 10% per batch.

2. QC measurements are performed on random samples.

3. QC data are within control limits.

FAYETTEVILLE PROJECT 1400 North Fox Hunter Road Fayetteville, Arkansas 72701 479-443-3292 Fax 479-443-5613 Corporate Headquarters 9193 S. Jamaica Street, Suite 400 Englewood, CO 80112 303-740-0019 Fax 303-740-7061



Fecal Colifom

ANALYTICAL REPORT

Date of Report: 02/25/09 Attention: William Winn File ID: Creek pipe crossing Project: Fayetteville 6th & Camelia D/T Collected: 02/24/09 / 1113 Sample Source: pipe casing leak Collected By: BR Lab ID #: 09-0221 Sample Date: 02/24/09 D/T Received: 02/24/09 / 1145 Sample Type: Grab Received By: BR Parameter Result Unit **Date Analyzed** Method Analyst

cfu/100ml 02/24/09 / 1205

Certified by: Bruce Richart, Lab Director

2

022509 Date:

SM 9222D.

DM/DM

FAYETTEVILLE PROJECT 1400 North Fox Hunter Road Fayetteville, Arkansas 72701 479-443-3292 Fax 479-443-5613 Corporate Headquarters 9193 S. Jamaica Street, Suite 400 Englewood, CO 80112 303-740-0019 Fax 303-740-7061



April 24, 2009

David Jurgens, P.E. Fayetteville, City of Paul R. Noland WastewaterTF 113 W. Mountain Street Fayetteville, AR 72701

RE: NPDES Permit AR0020010, AFIN 72-00102 Response to Inspection

Dear Mr. Jurgens:

ADEQ has received your response to the January 21, 2009 inspection at Premiere Plaza by our District Field Inspector, Brent Walker. Your letter appears to adequately address the discrepancies identified during the visit.

The Department will keep the inspection and response on file and will consider them as required by the Pollution Control and Ecology Commission Regulation No. 7, Civil Penalties. This regulation requires ADEQ to consider the past history of your company and how expeditiously the violations were addressed in determining any civil penalty that may be necessary for any violations.

Thank you for your attention to this matter. If we need further information, we will contact you. Should you have any questions, feel free to contact me by phone at 501-682-0632 or e-mail at <u>robertsa@adeq.state.ar.us</u>. In any written correspondence to this Department, please refer to NPDES Permit AR0020010 and AFIN 72-00102.

Sincerely,

Anne Roberts Enforcement Administrator Enforcement Branch Water Division