



TDEC - Division of Water Resources
Johnson City Field Office

ICIS NPDES Facilities Inspection Report

Facility Data

NPDES ID:	TN0068659	Facility Site Name:	Big Springs Water Treatment Plant		
		Address:	213 Water Plant Road, Elizabethton		
Permit Eff. Date:	Oct 25, 2016	Permit Exp Date:	Aug 19, 2020	SIC Code:	4941

Compliance Monitoring Information

Compliance Monitoring Activity Name:	Compliance Evaluation (non-sampling) (CEI)				
	* If Bio Monitoring is selected above, select the method used:				
Compliance Monitoring Activity:	Evaluation				

Compliance Monitoring Dates/Times

Entry Date/Time (mm/dd/yyyy hh:mm):	10/12/2016 9:00	Exit Date/Time (mm/dd/yyyy hh:mm):	10/12/2016 12:30		
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Facility Representatives

Doug Cornett, Plant Manager, 423-547-6347	Doug Cornett, Plant Manager, 423-547-6347
On-Site Representative(s) Title, Phone Number	Responsible Official(s), Title, Phone Number

Statute and Section Information

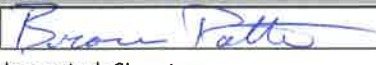

Federal Statute:	CWA - Clean Water Act	State Statute:	Tennessee Water Quality Control Act		
Programs:	NPDES- Base Program (Limits, Reporting, & Schedule)				
Compliance Monitoring Reason:	Core Program				
Compliance Monitoring Agency Type:	State	Agency Name:	TDEC - DWR		
Did EPA assist/ Inspection?	No	Time Physically conducting activity: Days:	1	Hours:	
Inspection Type:	State	Compliance Monitoring Action Outcome:			
Lead Agency:	State	Compliance Monitoring Rating Code:	Unrated		
If Joint Inspection, what was the purpose of the other party?					

Areas Evaluated During Inspection (Check only those areas evaluated)

<input checked="" type="checkbox"/> Permit	<input type="checkbox"/> Self - Compliance Program	<input type="checkbox"/> Pretreatment
<input checked="" type="checkbox"/> Records / Records	<input type="checkbox"/> Compliance Schedule	<input checked="" type="checkbox"/> Pollution Prevention
<input checked="" type="checkbox"/> Facility Site Review	<input checked="" type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water
<input checked="" type="checkbox"/> Effluent / Receiving Waters	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow
<input checked="" type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Sludge Handling / Disposal	<input type="checkbox"/> Sanitary Sewer Overflow

Compliance Monitoring Summary

EPA and State Representatives

	TDEC/DWR/JCEFO/423-854-5458	11-17-16
Inspector's Signature	Agency / Office / Phone	Date
	TDEC/DWR/JCEFO/423-854-5462	11/17/2016
Manager's Signature	Agency / Office / Phone	Date

(Note: This form can only be printed to an XPS document, then saved for later use.)



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
Johnson City Environmental Field Office
2305 Silverdale Road
Johnson City, Tennessee, 37601
Phone 423-854-5400 Statewide 1-888-891-8332 Fax 423-854-5401

November 2, 2016

Mr. Doug Cornett, Plant Manager
Big Springs Water Treatment Plant
136 South Sycamore Street
Elizabethton, TN 37643

RE: **Compliance Evaluation Inspection**
Big Springs Water Treatment Plant
WTP NPDES Permit No. TN0068659
Carter County

Dear Mr. Cornett:

On October 12, 2016, personnel from the Tennessee Department of Environment and Conservation, Division of Water Resources conducted a Compliance Evaluation Inspection at the Big Springs Water Treatment Plant (WTP) located at 213 Water Plant Road, Elizabethton, Tennessee. During the inspection, compliance with the General NPDES Permit for Discharges of Filter Backwash and Sedimentation Basin Washout from Water Treatment Plants, TN0068659, was evaluated. Mr. Doug Cornett was the primary representative from Big Springs WTP during the inspection. The division thanks Mr. Cornett, as well as other personnel with the Big Springs WTP, Ms. Lisa Childers, Mr. Jason Greene, Mr. Josh Rasnick, and Mr. Chuck Wilkins, for their assistance in conducting the inspection.

I. Permit

The General NPDES Permit for Discharges of Filter Backwash and Sedimentation Basin Washout from Water Treatment Plants addresses discharges of filter backwash and/or sedimentation basin wash water from Water Treatment Plants to waters of the State of Tennessee. Coverage under the general permit expired for Big Springs WTP June 30, 2015. The reissued permit became effective on August 21, 2015. Big Springs WTP did not submit an application to be covered under the new permit until October 19, 2016. Big Springs WTP is now

covered under the new general permit as of October 25, 2016. The permit covers one outfall that discharges into Gap Creek.

II. Monitoring Requirements

Discharges covered by this permit must comply with numerical effluent limitations and monitoring requirements established and identified on the Notice of Coverage. If the outfall of a WTP discharges effluent at any time during the monitoring period, the permittee must provide at least one sampling result from the effluent of that outfall. All sample types shall be grab samples, except the flow measurement which is instantaneous. Samples and measurements taken in compliance with the monitoring requirements set forth in the general permit shall be representative of the volume and nature of discharges of filter backwash and sedimentation basin wash water. The samples and measurements shall be taken after treatment of the filter backwash and sedimentation basin wash water and prior to mixing with contaminated or uncontaminated storm water runoff or the receiving stream.

Big Springs WTP samples once a month, by grab sample, at the one permitted facility discharge to Gap Creek at Mile 1.5 to the Watauga River. The sample is taken at the discharge pipe after treatment in the sedimentation basin. Total Residual Chlorine analysis as well as pH measurements are conducted by Big Springs WTP personnel, while the remaining analyses are conducted by ESC Laboratory Services. Flow is recorded as a calculation based on the flow rate of the filter backwash discharge and the time elapsed for the discharge. All laboratory and associated equipment is calibrated by Labtronix, Inc. at least once every six months. The standards, solutions, and buffers used during the in-house analyses were observed to verify they are appropriate and within their respective expiration dates. The laboratory area and equipment was also observed and found in a clean and orderly condition.

In 2014, changes were made to 40 CFR 136, for testing procedures. The new rule change established approximately 12 quality control elements to ensure that appropriate Quality Assurance and Quality Control (QA/QC) procedures are followed when conducting required analyses of WTP discharges. Only one element has been identified and implemented at this time at the Big Springs WTP, establishing the Method Detection Limit, which was conducted in February of 2016. Big Springs WTP personnel should immediately work on implementing all of the quality control elements required by the Method Update Rule. For a complete description and additional guidance concerning the new QA/QC requirements, you may find a quick reference guide for the Method Update Rule at: <http://www.tn.gov/environment/article/wr-ftc-waste-water-information>. A more in-depth presentation that was developed by Fleming Training Center for the Method Update Rule can be found at: http://www.tn.gov/assets/entities/environment/attachments/wwt_method-update-rule_ce_seminars-2014.pdf

III. Reporting and Records

Monitoring results shall be recorded monthly and submitted monthly using discharge monitoring report (DMR) forms supplied by the division. The DMR shall be postmarked no later than 15 days after the completion of the reporting period. Additionally, all records and information resulting from the monitoring activities required by this rule including all records of analyses performed, calibrations and maintenance of instrumentation shall be retained for a minimum of three (3) years.

All DMRs have been submitted to the division in a timely manner and were complete. There were no exceedances of the cutoff concentrations established by this permit. During the sampling event, however, only one time is being recorded and represents the analysis time. The permit requires that the sampling date and time as well as the analysis date and time shall be recorded to be able to verify that the sample holding times are within their respective limits. Please include both times during the sampling and analysis procedures when documenting the event(s).

IV. Facility BMP Review

In addition to the requirements listed above, the permittee shall maintain a clean and orderly facility and shall manage the handling, storage, and use of chemicals (process related, laboratory, cleaning products, etc.) to prevent release of materials. Sludge or any other material removed by any treatment works must be disposed of in a manner which prevents its entrance into or pollution of any surface or subsurface waters. Additionally, the disposal of such sludge or other material must be in compliance with the Tennessee Solid Waste Disposal Act, T.C.A. 68-31-101 *et seq.* and the Tennessee Hazardous Waste Management Act, T.C.A. 68-46-101 *et seq.*

1. The facility was found to be in a clean and orderly condition, with all chemicals used in the operation of this facility clearly marked and appropriately stored.
2. The sludge generated in the sedimentation basin is cleaned out approximately twice a year, at which point it is vacuumed out and treated at the local municipal waste water treatment plant.

V. Outfall and Receiving Waters

Observation of the one permitted discharge at Big Springs WTP showed no signs of any negative impact to the receiving stream. The discharge has also been appropriately identified with a sign at the point of discharge which includes information detailing the permit and facility.

Big Springs Water Treatment Plant
WTP NPDES CEI
November 2, 2016

VI. Additional Comments

1. There are no additional comments.

VII. Conclusion

Compliance with General NPDES Permit for Discharges of Filter Backwash and Sedimentation Basin Washout from Water Treatment Plants requirements helps to protect fish, aquatic life, and stream quality downstream of the outfalls, for all Tennesseans. The division requests that you develop and submit, by **November 15, 2016**, a detailed action plan and proposed implementation schedule addressing the deficiencies discussed in sections II. through VII. above. Thank you for your hard work and diligence in protecting the water quality in Tennessee. If you have any questions concerning this correspondence, please contact me at 423-854-5458 or via e-mail at brown.patton@tn.gov.

Sincerely,



Brown Patton
Division of Water Resources
Johnson City Environmental Field Office

CC: File Copy, DWR, Johnson City EFO