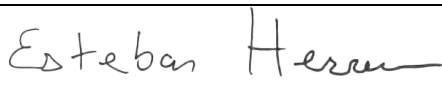


**Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT**

Inspection Date(s):	05/21/2018		
Media:	Water		
Regulatory Program(s)	NPDES		
Company Name:	Tyson Poultry, Inc.		
Facility Name:	Tyson Poultry, Inc. – Nashville Complex		
Facility Physical Location:	100 East Cassady St.	Lat. 33.926784, Long. -93.844128	
(city, state, zip code)	Nashville, AR 71852		
Mailing address:	100 East Cassady St.		
(city, state, zip code)	Nashville, AR 71852		
County/Parish:	Howard County		
Facility Contact:	Dale Patrick	Complex Environmental Manager	
	Dale.patrick@tyson.com		
FRS Number:	110021362434		
Identification/Permit Number:	AR0041734		
Media Number:			
NAICS:	221320		
SIC:	4952		
Personnel participating in inspection:			
Paul Juarez	EPA/ 6EN-WR	Inspector	214-665-7247
David Long	EPA/ 6EN-WM	Inspector	214-665-7323
Dale Patrick	Tyson- Nashville Complex	Complex Environmental Manager	870-845-1455
Nick Britt	Tyson- Nashville Complex	Plant Manager	870-845-1455
Mike Hanson	Tyson- Nashville Complex	Complex Manager	870-845-1455
Philip Mascarenas	Tyson- Nashville Complex	Wastewater Manager	870-845-1455
EPA Lead Inspector Signature/Date			
	Paul Juarez		Date
Supervisor Signature/Date			7/26/18
	Esteban Herrera		Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors Paul Juarez and David Long arrived at the Tyson Poultry Inc./Tyson Poultry, Inc. – Nashville Complex at 9:45 am on May 21, 2018 for an unannounced inspection. The ADEQ was invited to attend the inspection but declined. EPA met with Dale Patrick (Tyson Complex Environmental Manager), Nick Britt (Plant Manager), Mike Hanson (Complex Manager), and Philip Mascarenas (Wastewater Manager) at the Opening Conference. I presented my credentials to the Tyson Managers and informed him that this was an EPA inspection to determine compliance with the facility's ADEQ discharge permit and the Clean Water Act. The scope of the inspection was a full compliance evaluation inspection (CEI) and included an evaluation of the facility's physical site conditions and applicable records as required by the ADEQ discharge permit.

FACILITY DESCRIPTION

The 1.4 MGD Tyson wastewater treatment plant (WWTP) treated wastewaters resulting from the slaughter, cleaning, and processing of poultry (chicken) and boiler blowdown. The processing plant, which operated three shifts per day, had two 8-hr production shifts and one 8-hr sanitation shift. The facility was built in 1971 and employs 1000 workers. Processes include evisceration, deboning, chopped and blending, par frying, and packing out. Rejected chickens are rendered and sent to various facilities to be utilized in the secondary market.

The plant had screening headworks that sent wastewater to the 325,000 gallon aerated equalization tank. Following the headworks and aerated equalization tank, wastewater flow was sent to the Dissolved Air Floatation (DAF) tanks (1200 GPM and 600 GPM in succession). The DAF removes solids using air and polymers. The DAF unit sends sludge to the DAF sludge tank where it was later removed from the facility by Terra Renewal Services tanker trucks to be land applied under a separate ADEQ permit.

Effluent from the DAF is sent to the 1.5 MG aerated equalization tank. The aerated equalization tank (1.5 MG) equalized the flow then sent the effluent to the oxidation ditch (3.3 MG capacity). Flow was then carried to a clarifier (1 MG capacity) thence to the disinfection area/chlorination chamber (0.97 MGD). The final discharge then fell down stepped oxygenation channel to Mine Creek.

Section II – OBSERVATIONS

Plant Operations:

The plant wastewater treatment is monitored and operated 24 hours a day, 7 days a week, 365 days a year by five different state certified operators with advanced industrial certifications (4 of 5 operators). The screening was operating efficiently in the removal of gross and fine solids. The Dissolved Air Flotation (DAF) units were not operating at the time of the inspection. DAF 1 was used as a backup spare

in that it was operable but empty. DAF 2 did not trigger into operation until the effluent level reached 14 feet in the 325,000-gallon EQ tank (Aerated Equalization). The EQ tank was manually turned on by the operator so that the inspector could observe (Appendix 1, Photo 1). At the time of the inspection, the effluent appeared to be at 11 feet. The 1.5-million-gallon Aeration Basin (Appendix 1, Photo 2) contained three surface aerators and two venturi aerators and appeared to be in good working order. One of the Aeration Basin's pumps did not appear to be actively leaking but some traces of sludge were observed around the concrete pad (Appendix 1, Photo 3). Despite the visible signs of sludge, the runoff would most likely still end up in the Aeration Basin and not create an improper offsite discharge. From the Aeration Basin, wastewater was carried to the 3.3-million gallon Oxidation Ditch where the mixed liquor had a nice tan color. A reading was taken and recorded as 5500 ppm for mixed liquor suspended solids (MLSS) and 3.5 ppm DO (Appendix 1, Photo 4). The effluent was treated with aluminum chloride which was used to bind copper, zinc, sulfates, and other settling agents. Effluent was then sent to the 1-million-gallon Clarifier which was located within the Oxidation Ditch racetrack (Appendix 1, Photo 4). The operator took a sludge judge reading at the time of the inspection. The operator indicated that a sludge judge reading was taken twice a day. The inspectors observed six inches of sludge and approximately four inches of cloudy old sludge which indicated that the Clarifier did not need to be dredged. At the disinfection area, UV lights were used. Some white flakes were observed at the disinfection area (Appendix 1, Photo 5). One bank of bulbs was out of order at the time of the inspection. The flow meter was an ISCO 1310 UltraSonic that had been calibrated on October 20th, 2017. The aerobic digester was located at the center of the Oxidation ditch and Clarifier racetrack and appeared to be in good working order.

Plant Discharge:

The plant's 24-hour composite sampler was located following the final treatment unit (UV disinfection). At the discharge point, some algae was observed at the base of the white pipe which was an indicator of ammonia that may have accumulated over time (Appendix 1, Photo 6). A minimal amount of foam was observed.

Section III – AREAS OF CONCERN

During the Closing Conference which occurred on 5/21/2018, the following areas of concern were discussed with the facility managers:

- 1) An Aeration Basin pump seemed to have spilled some sludge either due to a leak or just a changing of hoses. The sludge should be removed and disposed of properly (Appendix 1, Photo 3).

Section IV – FOLLOW UP

None

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 6 photos taken 5/21/2018

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Tyson Poultry, Inc.- Nashville Complex		
City: Nashville	County/Parish: Howard	State: Arkansas



Photo File Name: DSCN0026.JPG

Date of Photo: 5/21/2018

Time of Photo: 11:32 am

Photographer: Paul Juarez

Description: Influent from screening is received into the Aerated Equalization (EQ) basin. Debris was observed on the walking platform.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Tyson Poultry, Inc.- Nashville Complex		
City: Nashville	County/Parish: Howard	State: Arkansas



Photo File Name: DSCN0027.JPG

Date of Photo: 5/21/2018

Time of Photo: 10:44 am

Photographer: Paul Juarez

Description: The aeration basin appeared to be in good working order. Pumps and piping appeared to be clear of major leaks.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Tyson Poultry, Inc.- Nashville Complex		
City: Nashville	County/Parish: Howard	State: Arkansas



Photo File Name: DSCN0028.JPG

Date of Photo: 5/21/2018

Time of Photo: 10:44 am

Photographer: Paul Juarez

Description: One of the pumps for the aeration basin did not appear to be actively leaking but traces of sludge were observed around its concrete pad which would indicate that some leaking had occurred before and had not been cleaned up. Despite the visible signs of sludge exposed to storm water, it would appear that the runoff would still head towards the aeration basin.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Tyson Poultry, Inc.- Nashville Complex		
City: Nashville	County/Parish: Howard	State: Arkansas



Photo File Name: DSCN0029.JPG

Date of Photo: 5/21/2018

Time of Photo: 11:01 am

Photographer: Paul Juarez

Description: The photo was taken of the oxidation ditch which appeared to be a good, healthy, tan color.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Tyson Poultry, Inc.- Nashville Complex		
City: Nashville	County/Parish: Howard	State: Arkansas



Photo File Name: DSCN0031.JPG

Date of Photo: 5/21/2018

Time of Photo: 11:07 am

Photographer: Paul Juarez

Description: The photo was taken of the disinfection area where some white flakes were visible.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: Tyson Poultry, Inc.- Nashville Complex		
City: Nashville	County/Parish: Howard	State: Arkansas



Photo File Name: DSCN0032.JPG

Date of Photo: 5/21/2018

Time of Photo: 11:24 am

Photographer: Paul Juarez

Description: The photo was taken of the final outfall point. Some green algae can be seen at the base of the white pipe. This was an indicator of ammonia that may have accumulated over time. A minimal amount of foam was observed. The receiving stream appeared clear and free of turbidity.