ADEQ
ARKANSAS
Department of Environmental Quality

August 2, 2016

Kathryn Catlin, Wastewater Systems Manager
City of Harrison
P.O. Box 1715
Harrison, AR 72602

RE: City of Harrison WWTP Inspections (Boone Co)
AFIN: 05-00054 Permit No.: AR0034321
ARR00C373
5158-W

Dear Ms. Catlin:

On July 20, 2016, I performed a Compliance Evaluation Inspection, a Collection System Inspection, a No-Exposure Stormwater Inspection, and a Biosolids Land Application inspection of the above referenced facility in accordance with the provisions of the Federal Clean Water Act, the Arkansas Water and Air Pollution Control Act, and the regulations promulgated thereunder. Copies of the inspection reports are enclosed for your records.

Please refer to the "Summary of Findings" section of each of the attached inspection reports and provide a written response for each violation that was noted. This response should be mailed to the attention of the Water Division Inspection Branch at the address at the bottom of this letter or e-mailed to Water-Inspection-Report@adeq.state.ar.us. This response should contain documentation describing the course of action taken to correct each item noted. This corrective action should be completed as soon as possible, and the written response with all necessary documentation (i.e., photos) is due by **August 16, 2016**.

If I can be of any assistance, please contact me at wallace@adeq.state.ar.us or (870) 424-3322 extension 3.

Sincerely,

Cody Wallace
District 2 Field Inspector
Water Division

ADEQ
ARKANSAS
Department of Environmental Quality

WATER DIVISION INSPECTION REPORT

AFIN: **05-00054** | PERMIT #: **AR0034321** | DATE: **7/20/2016**

COUNTY: **05 Boone** | PDS #: **092065** | MEDIA: **WN**

GPS LAT: **36.237209** LONG: **-93.077106** LOCATION: **General Area**

FACILITY INFORMATION

NAME:
City of Harrison WWTP
LOCATION:
1508 Silver Valley Rd
CITY:
Harrison, AR

RESPONSIBLE OFFICIAL

NAME: / TITLE
Kathryn Catlin / Wastewater Systems Manager
COMPANY:
City of Harrison
MAILING ADDRESS:
P.O. Box 1715
CITY, STATE, ZIP:
Harrison AR 72602
PHONE & EXT: / FAX:
870-741-5527 /
EMAIL:
kathryn.catlin@cityofharrison.com

CONTACTED DURING INSPECTION: **Yes**

INSPECTION INFORMATION

FACILITY TYPE: **1 - Municipal**
INSPECTOR ID#: **109962 S - State**
FACILITY EVALUATION RATING: **3 - Satisfactory**
INSPECTION TYPE: **Compliance Evaluation**
DATE(S): **7/20/2016**
ENTRY TIME: **08:27**
EXIT TIME: **14:38**
PERMIT EFFECTIVE DATE: **10/1/2007**
PERMIT EXPIRATION DATE: **9/30/2012**

FAYETTEVILLE SHALE RELATED: **N**

FAYETTEVILLE SHALE VIOLATIONS: **N**

INSPECTION PARTICIPANTS

NAME/TITLE/PHONE/FAX/EMAIL/ETC.:
Kathryn Catlin Lic# 002003/Wastewater Systems Manager/870-741-5527/kathryn.catlin@cityofharrison.com

Mike Crow Lic# 007153/870-741-5527/michael.crow@cityofharrison.com

AREA EVALUATIONS

(S=Satisfactory, M=Marginal, U=Unsatisfactory, N=Not Applicable/Evaluated)

S	PERMIT	**S**	FLOW MEASUREMENT	**M**	STORMWATER
S	RECORDS/REPORTS	**S**	LABORATORY	**S**	FACILITY SITE REVIEW
S	OPERATION & MAINTENANCE	**S**	EFFLUENT/RECEIVING WATER	**S**	SELF-MONITORING PROGRAM
S	SAMPLING	**S**	SLUDGE HANDLING/DISPOSAL	**N**	PRETREATMENT
****	OTHER:				

SUMMARY OF FINDINGS

Buffer for the lab's pH meter was expired. This is a violation of Part II, Section B, 1.A. of the permit. Expired buffers will need to be replaced.

GENERAL COMMENTS

On Wednesday, July 20, 2016 an inspection was conducted with the above-mentioned inspection participants. The inspection included a facility assessment and records review.

Facility assessment:

The treatment system for the city consists of: collection system→bar screens→grit removal chamber→primary clarifier→oxidation ditches→secondary clarifiers→UV disinfection→cascade aeration. Trickling filters and chlorination/dechlorination are no longer used in the treatment process (i.e., trickling filters are not mentioned as a treatment phase in the permit, but chlorination/dechlorination are). Crooked Creek is the receiving stream for effluent generated from the WWTP.

Aerobic digesters, a belt press, and polymers are utilized for sludge handling and dewatering. Class B biosolids are generated at the facility and are land applied on agricultural land under permit number 5158-W. Mr. Mike Crow estimated that the facility has been using the digesters for approximately four (4) years, which allows nearly a 42% reduction in sludge produced. Currently, around six (6) tons of biosolids are produced per week at the plant according to Mr. Crow.

Sample types include 24-hr composites (CBOD, TSS, NH3-N, TP, WET), grab samples (DO, FCB, TRC, pH), and totalized (flow). 410 mL per sample per hour are collected over a 24-hr period for composite samples. Flow is currently being recorded prior to UV disinfection. The permit states, *"Samples taken in compliance with the monitoring requirements specified above shall be taken at the following sampling location: immediately following the dechlorination unit for all parameters except DO and immediately following the cascade for DO."* As noted, the chlorination/dechlorination unit is no longer employed and UV disinfection is now installed. Please note to the permit engineer in the renewal process that flow measurements are recorded prior to UV disinfection rather than post disinfection.

Records Review:

The permittee samples/analyzes flow, CBOD, TSS, NH3-N, TP, DO, FCB, TRC, and pH. Biomonitoring (i.e., WET testing) is completed by a contract lab. November 2015-present DMRs were reviewed. No exceedances were registered for the period observed. In-house lab and contracted lab records (i.e., chain of custody (COC) forms, lab analyses sheets, and DMRs) were thorough and complete.

In general, the treatment plant, facility lab, and records were well-maintained and orderly. Furthermore, recent and historical monitoring results suggest quality effluent is discharged from the plant.

INSPECTOR'S SIGNATURE: Cody Wallace	**Cody Wallace**	DATE: **7/25/2016**
SUPERVISOR'S SIGNATURE: Kerri McCabe	**Kerri McCabe**	DATE: **8/2/2016**

SECTION A: PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS	☑S ☐M ☐U ☐NA ☐NE
DETAILS: **Permit is expired; permittee is in the renewal process.**	
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE:	☑Y ☐N ☐NA ☐NE
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES:	☐Y ☐N ☑NA ☐NE
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT:	☑Y ☐N ☐NA ☐NE
4. ALL DISCHARGES ARE PERMITTED:	☑Y ☐N ☐NA ☐NE

SECTION B: RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT	☑S ☐M ☐U ☐NA ☐NE
DETAILS: **Permittee samples/analyzes flow, CBOD, TSS, NH3-N, TP, DO, FCB, TRC, and pH; contract lab completes WET testing.**	
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS:	☑Y ☐N ☐NA ☐NE
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE:	☑S ☐M ☐U ☐NA ☐NE
a. DATES AND TIME(S) OF SAMPLING:	☑Y ☐N ☐NA ☐NE
b. EXACT LOCATION(S) OF SAMPLING:	☑Y ☐N ☐NA ☐NE
c. NAME OF INDIVIDUAL PERFORMING SAMPLING:	☑Y ☐N ☐NA ☐NE
d. ANALYTICAL METHODS AND TECHNIQUES:	☑Y ☐N ☐NA ☐NE
e. RESULTS OF CALIBRATIONS:	☑Y ☐N ☐NA ☐NE
f. RESULTS OF ANALYSES:	☑Y ☐N ☐NA ☐NE
g. DATES AND TIMES OF ANALYSES:	☑Y ☐N ☐NA ☐NE
h. NAME OF PERSON(S) PERFORMING ANALYSES:	☑Y ☐N ☐NA ☐NE
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE:	☑S ☐M ☐U ☐NA ☐NE
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR:	☑S ☐M ☐U ☐NA ☐NE
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA:	☑Y ☐N ☐NA ☐NE

SECTION C: OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED	☑S ☐M ☐U ☐NA ☐NE
DETAILS: **Trickling filters and chlorination/dechlorination system no longer in use.**	
1. TREATMENT UNITS PROPERLY OPERATED:	☑S ☐M ☐U ☐NA ☐NE
2. TREATMENT UNITS PROPERLY MAINTAINED:	☑S ☐M ☐U ☐NA ☐NE
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED: **One stationary generator for WWTP, one stationary generator for Main Lift Station, and one portable generator for other lift stations.**	☑S ☐M ☐U ☐NA ☐NE
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE:	☑S ☐M ☐U ☐NA ☐NE
5. ALL NEEDED TREATMENT UNITS IN SERVICE:	☑S ☐M ☐U ☐NA ☐NE
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED: **One operator with Class IV, multiple with Class III and lower.**	☑S ☐M ☐U ☐NA ☐NE
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED: **valves, fuses, etc.**	☑S ☐M ☐U ☐NA ☐NE
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE:	☑Y ☐N ☐NA ☐NE
9. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED:	☑Y ☐N ☐NA ☐NE
10. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED:	☑Y ☐N ☐NA ☐NE
11. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR: **Overflows of collection system only.**	☑Y ☐N ☐NA ☐NE
12. IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED:	☑Y ☐N ☐NA ☐NE
13. HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS: **Replacing and cleaning lines.**	☑Y ☐N ☐NA ☐NE
14. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT:	☐Y ☑N ☐NA ☐NE
15. IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT:	☐Y ☐N ☑NA ☐NE

SECTION D: SAMPLING	
PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS	☑S ☐M ☐U ☐NA ☐NE
DETAILS: **Permittee samples/analyzes flow, CBOD, TSS, NH3-N, TP, DO, FCB, TRC, and pH; contract lab completes WET testing.**	
1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT:	☑Y ☐N ☐NA ☐NE
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES:	☑Y ☐N ☐NA ☐NE
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT:	☑Y ☐N ☐NA ☐NE
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT:	☑Y ☐N ☐NA ☐NE
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT:	☑Y ☐N ☐NA ☐NE
6. SAMPLE COLLECTION PROCEDURES ADEQUATE:	☑Y ☐N ☐NA ☐NE
a. SAMPLES REFRIGERATED DURING COMPOSITING:	☑Y ☐N ☐NA ☐NE
b. PROPER PRESERVATION TECHNIQUES USED:	☑Y ☐N ☐NA ☐NE
c. CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136:	☑Y ☐N ☐NA ☐NE
7. IF MONITORING IS PERFORMED MORE OFTEN THAN REQUIRED ARE RESULTS REPORTED ON THE DMR:	☐Y ☐N ☑NA ☐NE

SECTION E: FLOW MEASUREMENT	
PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS	☑S ☐M ☐U ☐NA ☐NE
DETAILS:	
1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED: **Yes** TYPE OF DEVICE: **18" Parshall flume**	☑Y ☐N ☐NA ☐NE
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED:	☑Y ☐N ☐NA ☐NE
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED:	☑Y ☐N ☐NA ☐NE
4. CALIBRATION FREQUENCY ADEQUATE: **Calibrated December 15, 2015**	☑Y ☐N ☐NA ☐NE
5. RECORDS MAINTAINED OF CALIBRATION PROCEDURES:	☑Y ☐N ☐NA ☐NE
6. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE:	☑Y ☐N ☐NA ☐NE
7. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE:	☑Y ☐N ☐NA ☐NE
8. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES:	☑Y ☐N ☐NA ☐NE
9. HEAD MEASURED AT PROPER LOCATION:	☑Y ☐N ☐NA ☐NE

SECTION F: LABORATORY	
PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS	☑S ☐M ☐U ☐NA ☐NE
DETAILS: **Permittee samples/analyzes flow, CBOD, TSS, NH3-N, TP, DO, FCB, TRC, and pH; contract lab completes WET testing.**	
1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(B) FOR SLUDGES) :	☑Y ☐N ☐NA ☐NE
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED:	☐Y ☐N ☑NA ☐NE
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT:	☑Y ☐N ☐NA ☐NE
4. QUALITY CONTROL PROCEDURES ADEQUATE:	☑Y ☐N ☐NA ☐NE
5. DUPLICATE SAMPLES ARE ANALYZED ≥10% OF THE TIME:	☑Y ☐N ☐NA ☐NE
6. SPIKED SAMPLES ARE ANALYZED ≥10% OF THE TIME:	☑Y ☐N ☐NA ☐NE
7. COMMERCIAL LABORATORY USED:	☑Y ☐N ☐NA ☐NE
a. LAB NAME: **Waypoint Analytical**	
b. LAB ADDRESS: **2790 Whitten Rd, Memphis, TN 38133**	
c. PARAMETERS PERFORMED: **Biomonitoring, sludge analyses, soil analyses**	
8. BIOMONITORING PROCEDURES ADEQUATE:	☑Y ☐N ☐NA ☐NE
a. PROPER ORGANISMS USED:	☑Y ☐N ☐NA ☐NE
b. PROPER DILUTION SERIES FOLLOWED:	☑Y ☐N ☐NA ☐NE
c. PROPER TEST METHODS AND DURATION:	☑Y ☐N ☐NA ☐NE
d. RETESTS AND/OR TRE PERFORMED AS REQUIRED:	☐Y ☐N ☑NA ☐NE

SECTION G: EFFLUENT/RECEIVING WATERS OBSERVATIONS

BASED ON VISUAL OBSERVATIONS ONLY — ☑S ☐M ☐U ☐NA ☐NE

DETAILS: **Observed at primary flow measuring device prior to UV disinfection and cascade aeration.**

OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER
001	NO	NO	NO	NO	NO	CLEAR	N/A

SECTION H: SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS — ☑S ☐M ☐U ☐NA ☐NE

DETAILS: **Class B biosolids are generated at the plant. Sludge is pressed and polymers area added to reduce moisture. Dewatered biosolids are land applied under permit 5158-W.**

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY: ☑S ☐M ☐U ☐NA ☐NE
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503: ☑S ☐M ☐U ☐NA ☐NE
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: (E.G., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE): **Agricultural**

SECTION I: SAMPLING INSPECTION PROCEDURES

SAMPLE RESULTS WITHIN PERMIT REQUIREMENTS — ☐S ☐M ☐U ☑NA ☐NE

DETAILS:

1. SAMPLES OBTAINED THIS INSPECTION: ☐Y ☐N ☑NA ☐NE
2. TYPE OF SAMPLE: ☐GRAB:__ ☐COMPOSITE:__ METHOD:__ FREQUENCY:
3. SAMPLES PRESERVED: ☐Y ☐N ☑NA ☐NE
4. FLOW PROPORTIONED SAMPLES OBTAINED: ☐Y ☐N ☑NA ☐NE
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE: ☐Y ☐N ☑NA ☐NE
6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE: ☐Y ☐N ☑NA ☐NE
7. SAMPLE SPLIT WITH PERMITTEE: ☐Y ☐N ☑NA ☐NE
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED: ☐Y ☐N ☑NA ☐NE
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT: ☐Y ☐N ☑NA ☐NE

SECTION J: STORM WATER POLLUTION PREVENTION PLAN

STORM WATER MANAGEMENT MEETS PERMIT REQUIREMENTS — ☐S ☑M ☐U ☐NA ☐NE

DETAILS: **No-Exposure inspected under ARR00C373.**

1. SWPPP UPDATED AS NEEDED:__ DATE OF LAST UPDATE: ☐Y ☐N ☑NA ☐NE
2. SITE MAP INCLUDING ALL DISCHARGES AND SURFACE WATERS: ☐Y ☐N ☑NA ☐NE
3. POLLUTION PREVENTION TEAM IDENTIFIED: ☐Y ☐N ☑NA ☐NE
4. POLLUTION PREVENTION TEAM PROPERLY TRAINED: ☐Y ☐N ☑NA ☐NE
5. LIST OF POTENTIAL POLLUTANT SOURCES: ☐Y ☐N ☑NA ☐NE
6. LIST OF POTENTIAL SOURCES AND PAST SPILLS AND LEAKS: ☐Y ☐N ☑NA ☐NE
7. ALL NON-STORM WATER DISCHARGES ARE AUTHORIZED: ☐Y ☐N ☑NA ☐NE
8. LIST OF STRUCTURAL BMPS: ☐Y ☐N ☑NA ☐NE
9. LIST OF NON-STRUCTURAL BMPS: ☐Y ☐N ☑NA ☐NE
10. BMPS PROPERLY OPERATED AND MAINTAINED: ☐Y ☐N ☑NA ☐NE
11. INSPECTIONS CONDUCTED AS REQUIRED: ☐Y ☐N ☑NA ☐NE

pH

Sample Dates: Yes **Times:** Yes **Exact Location:** Yes
Analysis Dates: Yes **Times:** Yes **Analyst:** Yes
Method Numbers: Yes **Are method numbers EPA approved:** Yes
Are grab samples being obtained? Yes

Holding Time: Yes, analyzes immediately within 15 minutes after the time of sample collection.

pH meter: pH meter observed is adequate for analyses

a. must have a potentiometer, electrode, and a temperature compensating device
b. must be accurate and reproducible to 0.1 pH unit with a range of 0-14

How many buffers do you use for calibration of the pH meter? 2 buffers---4 pH and 7 pH

Do you date the buffer solutions? Yes

How often do you replace the buffer solutions? Daily

Do you maintain a logbook on the calibration and maintenance of the pH meter and is it available for review? Yes

Does the pH meter have a temperature compensator? Yes

Do you record the temperature? No

Is duplicate analysis conducted? Yes

Have you established control limits for duplicate analysis? Yes, based on standard methods for parameter monitored

Do the duplicate analysis fall within the control limits? Yes, permittee commented they have not had trouble with differences in duplicate analyses.

Do you have QA/QC charts for us to review? Yes, QA/QC completed yearly

FLOW CALCULATION SHEET

Date: **July 20, 2016** Time: **8:51**

Head in Inches: **9”** Feet: **0.75’**

Type & Size of Primary Flow Measurement Device: **18” Parshall Flume**

Name & Model of Secondary Flow Measurement Device: **Honeywell DR4300**

Date of last Calibration of Secondary Flow Device: **December 15, 2015**

Recorded Flow at Date & Time Listed Above: **2.50 MGD** (Facility Flow Meter)

Calculated Flow at Date & Time Listed Above: **2.491 MGD**

(Flow is calculated using flow charts in: ISCO Open Channel Flow Measurement Handbook-5th Edition)

$$\% \text{ Error} = \frac{\text{Recorded Value} - \text{Calculated Value}}{\text{Calculated Value}} \times 100$$

$$\% \text{ Error} = \frac{2.50 - 2.491}{2.491} \times 100$$

$$\% \text{ Error} = \frac{0.009}{2.491} \times 100$$

$$\% \text{ Error} = 0.0036 \times 100$$

% Error = **0.36** %

Comments: **OK; measurement within plus or minus 10%.**

DMR Calculation Check

Reporting Period:	**From**	**2015** (Year)	**11** (Month)	**1** (Day)	**To**	**2015** (Year)	**11** (Month)	**30** (Day)

Parameter Checked: **CBOD5**

	Loading	**Concentration**	
	Mass	**Monthly**	
	Mo. Avg. - lbs/day	**Mo. Avg. - mg/l**	**7-day Avg. - mg/l**
Reported Value:	**42.3**	**2.95**	**5.6**
Calculated Value:	**42.3**	**2.95**	**5.6**
Permit Value:	**217**	**10**	**15**

If calculated value does not equal reported value, explain:

Values are the same. See Figure 2 for calculations.

DMR Calculation Check

Reporting Period:	**From**	**2016** (Year)	**04** (Month)	**1** (Day)	**To**	**2016** (Year)	**04** (Month)	**30** (Day)

Parameter Checked: NH3-N

	Loading Mass Mo. Avg. - lbs/day	Concentration Monthly Mo. Avg. - mg/l	Concentration Monthly 7-day Avg. - mg/l
Reported Value:	1.0	0.07	0.14
Calculated Value:	1.0	0.07	0.14
Permit Value:	39	1.8	4.6

If calculated value does not equal reported value, explain:

Values are the same. See Figure 3 for calculations.

Water Division Photographic Evidence Sheet					
Location:	**City of Harrison WWTP**				
Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**834**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**1**
Description:	**Bar screen at headworks of plant.**				

Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**836**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**2**
Description:	**Grit removal chamber at headworks of plant.**				

Water Division Photographic Evidence Sheet					
Location:	**City of Harrison WWTP**				
Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**837**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**3**
Description:	**Primary clarifier for treatment plant.**				

Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**841**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**4**
Description:	**Parallel oxidation ditches employed after primary clarification.**				

Water Division Photographic Evidence Sheet					
Location:	**City of Harrison WWTP**				
Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**842**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**5**
Description:	**1 of 2 secondary clarifiers following oxidation ditches. Site has two (2) secondary clarifiers.**				

Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**844**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**6**
Description:	**2 of 2 secondary clarifiers following oxidation ditches. Site has two (2) secondary clarifiers.**				

Water Division Photographic Evidence Sheet					
Location:	**City of Harrison WWTP**				
Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**842**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**7**
Description:	**View of a secondary clarifier weir with water discharging.**				

Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**857**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**8**
Description:	**18” Parshall flume flow measurement device prior to UV disinfection.**				

Water Division Photographic Evidence Sheet					
Location:	**City of Harrison WWTP**				
Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**847**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**9**
Description:	**UV disinfection units.**				

Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**849**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**10**
Description:	**Composite sampler following UV disinfection.**				

Water Division Photographic Evidence Sheet					
Location:	**City of Harrison WWTP**				
Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**849**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**11**
Description:	**Cascade aeration leading to Outfall 001.**				

Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**850**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**12**
Description:	**Continued cascade aeration leading to Outfall 001.**				

Water Division Photographic Evidence Sheet					
Location:	**City of Harrison WWTP**				
Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**857**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**13**
Description:	**1 of 2 aerobic digesters. Site has two (2) aerobic digesters.**				

Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**900**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**14**
Description:	**2 of 2 aerobic digesters. Site has two (2) aerobic digesters.**				

Water Division Photographic Evidence Sheet					
Location:	**City of Harrison WWTP**				
Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**902**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**15**
Description:	**Belt press for dewatering sludge.**				

Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**859**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**16**
Description:	**Trickling filters no longer in use at the facility.**				

Water Division Photographic Evidence Sheet					
Location:	**City of Harrison WWTP**				
Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**847**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**17**
Description:	**Chlorination unit and chamber no longer in use at the facility.**				

Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**924**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**18**
Description:	**Facility flow meter.**				

Water Division Photographic Evidence Sheet					
Location:	**City of Harrison WWTP**				
Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**926**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**19**
Description:	**Meter was last calibrated on December 15, 2015.**				

Photographer:	**Cody Wallace**	Date:	**July 20, 2016**	Time:	**930**
Witness:	**Kathryn Catlin, Mike Crow**			Photo #:	**20**
Description:	**pH meter and buffer used in facility lab.**				

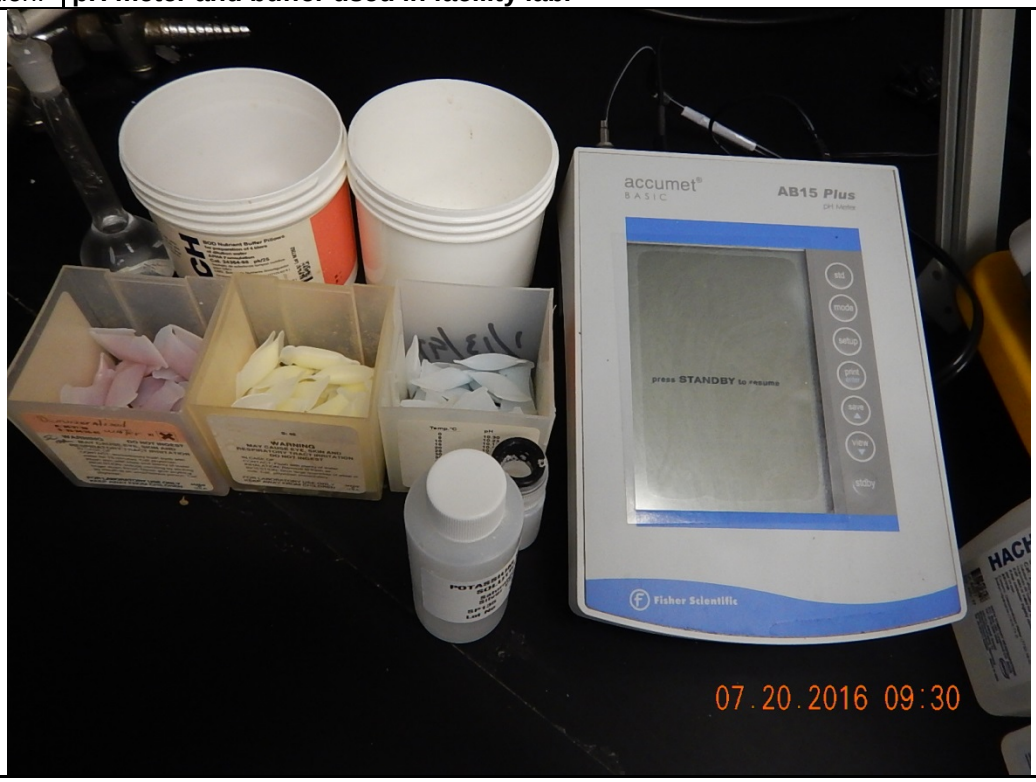

Figure 1. Aerial view of City of Harrison WWTP and associated components (Google Earth: imagery date April 24, 2014). Note trickling filters and chlorination unit/chamber are no longer utilized in the treatment process.

Figure 2. November 2015 Outfall 001 CBOD calculations.

November 2015 Outfall 001 CBOD calculations				
Date	Concentration	7-day Average	Daily Flow (MGD)	Mass (lbs/day)
4	4.575	4.575	1.267	48.3
12	5.6	5.6	1.553	72.5
18	1.275	1.275	4.041	43.0
24	0.33	0.33	1.891	5.2
MAX	5.6		MAX	72.5
MIN	0.33		MIN	5.2
MEAN	2.95		MEAN	42.3

Figure 3. April 2016 Outfall 001 NH3-N calculations.

April 2016 Outfall 001 NH3-N calculations				
Date	Concentration	7-day Average	Daily Flow (MGD)	Mass (lbs/day)
6	0.07	0.07	1.646	1.0
12	0.045	0.045	1.737	0.7
18	0.025	0.025	1.742	0.4
25	0.14	0.14	1.612	1.9
MAX	0.14		MAX	1.9
MIN	0.03		MIN	0.4
MEAN	0.07		MEAN	1.0

From:	Kathryn Catlin
To:	Water-Inspection-Report
Subject:	RE: Response to 2016 Inspection Report City of Harrison AR0034321, ARR00C373, 5158-W
Date:	Tuesday, August 02, 2016 3:10:29 PM
Attachments:	2016 Response to ADEQ Inspection.pdf

Attached please find the **revised** response to the Inspections report dated August 2, 2016 for the City of Harrison. If you have any questions, or require any additional information please feel free to contact me.

Kathryn Catlin

From: Kathryn Catlin [mailto:kathryn.catlin@cityofharrison.com]
Sent: Tuesday, August 02, 2016 2:51 PM
To: 'Water-Inspection-Report@adeq.state.ar.us'
Subject: Response to 2016 Inspection Report City of Harrison AR0034321, ARR00C373, 5158-W

Attached please find the response to the Inspections report dated August 2, 2016 for the City of Harrison WWTP. If you have any questions, or require any additional information please feel free to contact me.

Kathryn Catlin
Wastewater Systems Manager
Harrison
Arkansas
PO Box 1715
Harrison, Arkansas 72601
Office: 870.741.5527
Fax: 870.741.0318
kathryn.catlin@cityofharrison.com

Harrison
Arkansas

Department of
Public Works

Wastewater Department
Kathryn Catlin
Wastewater Systems Manager
1508 Silver Valley Road
Harrison, Arkansas 72601
Office: 870.741.5527
Fax: 870.741.0318
www.cityofharrison.com
kathryn.catlin@cityofharrison.com

8/2/2016

Cody Wallace
District 2 Field Inspector
ADEQ – Water Division
5301 Northshore Drive
North Little Rock, AR 72118-5317

RE: City of Harrison WWTP Inspections (Boone Co)
AFIN: 05-00054 Permit No.: AR0034321
ARR00C373
5158-W

Dear M. Wallace:

In response to your reports on the Compliance Evaluation Inspection, Collections System Inspection, and No-Exposure Stromwater Inspection conducted on July 20, 2016; the following corrective actions have been taken:

AR0034321 – New pH buffers were ordered July 20, 2016. Until the new buffers arrive, the laboratory used non-expired buffers borrowed from the City's Pretreatment Coordinator. The laboratory technician is now writing the expiration date on all chemical bottles and containers.

AR0034321 Collection System – Emergency contact signs were posted at all of the lift stations on Thursday August 29, 2016 (see Attachment A for examples). Accumulated solids and grease were removed from the Meyers Lift Station and the Forest Heights Lift Station on Friday, July 22, 2016.

ARR00C37 – All items listed in the Summary of Findings have been addressed (see attached pictures in Attachment B). Fluid containers and waste materials (e.g., piles of scrap metal) have been removed. Spills have been cleaned up and/or sealed.

5158-W – When the biosolids sample was sent to the laboratory in October 2015 the second page of the Chain of Custody was not documented by the receiving personnel. All missing parameters were on the second page of the Chain of Custody. A biosolids sample was collected on July 29, 2016 and sent to Waypoint Analytical for analysis of Molybdenum, Selenium, Zinc, Polychlorinated Biphenyls (PCBs), Magnesium, Sodium, Calcium, and Sodium Absorption Ration (SAR). Once the City receives the results we will revise our 2015 Land Application Report and Biosolids DMRs to reflect the new data.

If you have any questions or require any additional information, please feel free to contact me at 870-741-5527 or Kathryn.catlin@cityofharrison.com.

Sincerely,

Kathryn Catlin
Wastewater Systems Manager

ATTACHMENT A

ATTACHMENT B

Photo #1 Barrels & buckets unsealed and residuals from spills exposed to stormwater – **AFTER** Barrels & buckets remove, soil removed, & gravel added.

Photo #2 Unsealed barrels and spill/leak constituents exposed to stormwater – **AFTER** Asphalt sealent used to seal oil stains.

Photo #3 Unsealed/deteriorating bucket and barrel exposed to stormwater – **AFTER**
Barrel & bucket removed, there were no signs of leakage on soil.

Photo #4 Scrap waste on ground exposed to stormwater – **AFTER**
Scrap metal & bucket removed.

From:	Kathryn Catlin
To:	Wallace, Cody; Water-Inspection-Report
Subject:	RE: Response to 2016 Inspection Report City of Harrison AR0034321, ARR00C373, 5158-W
Date:	Wednesday, August 03, 2016 7:27:11 AM
Attachments:	image004.png 2016 Response to Inspections lift stations.pdf

Cody,

Per your request, attached find pictures of Meyers Lift Station and Forest Height Lift Station after they were cleaned out. If you have any questions or require any additional information please feel free to contact me.

Kathryn Catlin
Wastewater Systems Manager
Harrison
Arkansas
PO Box 1715
Harrison, Arkansas 72601
Office: 870.741.5527
Fax: 870.741.0318
kathryn.catlin@cityofharrison.com

From: Wallace, Cody [mailto:wallace@adeq.state.ar.us]
Sent: Tuesday, August 02, 2016 3:17 PM
To: Kathryn Catlin
Subject: RE: Response to 2016 Inspection Report City of Harrison AR0034321, ARR00C373, 5158-W

Kathryn,
Can you please provide photos of the wet wells that were cleaned out? Once those are received that will take care of everything.

Thanks,

Cody Wallace
Inspector---Water Division District 2
Arkansas Department of Environmental Quality
Office---(870) 424-3322 ext. 3
Cell---(501) 837-2074

From: McCabe, Kerri
Sent: Tuesday, August 02, 2016 3:03 PM
To: Kathryn Catlin
Cc: Wallace, Cody
Subject: RE: Response to 2016 Inspection Report City of Harrison AR0034321, ARR00C373, 5158-W

Ms. Catlin,

You have an August 29, 2016 date in the response. I assume this is July 29, 2016. This email confirms we have received your responses to Inspector Wallace's inspections, and he will determine adequacy of the responses. Thank you.

Kerri McCabe

Inspector Supervisor
ADEQ – Water Division
Field Services – Inspection Branch

Office – (501) 682-0642
Work Cell – (501) 352-5641
Fax – (501) 682-0880
5301 Northshore Drive
North Little Rock, AR 72118-5317

ADEQ
ARKANSAS
Department of Environmental Quality

From: Kathryn Catlin [mailto:kathryn.catlin@cityofharrison.com]
Sent: Tuesday, August 02, 2016 2:51 PM
To: Water-Inspection-Report
Subject: Response to 2016 Inspection Report City of Harrison AR0034321, ARR00C373, 5158-W

Attached please find the response to the Inspections report dated August 2, 2016 for the City of Harrison WWTP. If you have any questions, or require any additional information please feel free to contact me.

Kathryn Catlin
Wastewater Systems Manager

Harrison
Arkansas

PO Box 1715
Harrison, Arkansas 72601
Office: 870.741.5527
Fax: 870.741.0318
kathryn.catlin@cityofharrison.com

Photo #4 Wet well of Meyers Lift Station; solids/grease high. AFTER

Photo # 12 Wet well of Forest Heights Lift Station; solids/grease moderate. **AFTER**

ADEQ

A R K A N S A S
Department of Environmental Quality

August 8, 2016

Kathryn Catlin, Wastewater Systems Manager
City of Harrison
P.O. Box 1715
Harrison, AR 72602

RE: Response to City of Harrison WWTP Inspections (Boone Co)
AFIN: 05-00054 **Permit No.: AR0034321**
ARR00C373
5158-W

Dear Ms. Catlin:

I have reviewed the response pertaining to my July 20, 2016 inspections of the above-referenced facility. The information provided sufficiently addresses the violations referenced in my inspection report. At this time, the Department has no further comment concerning this particular inspection. Acceptance of this response by the Department does not preclude any future enforcement action deemed necessary at this site or any other site.

If we need further information concerning this matter, we will contact you. Thank you for your attention to this matter. Should you have any questions, feel free to contact me at (870) 424-3322 ext. 3 or you may e-mail me at wallace@adeq.state.ar.us.

Sincerely,

Cody Wallace

Cody Wallace
District 2 Field Inspector
Water Division