



ARKANSAS

ENERGY & ENVIRONMENT

February 15, 2022

Tommy Lawson, Manager
Stuttgart Municipal Water Works
612 S College Street
PO Box 130
Stuttgart, AR 72160
Via email to: stuttgartarwater@centurytel.net

RE: Stuttgart Municipal Water Works Inspection (Arkansas Co)
AFIN: 01-00214 **NPDES Permit No.: AR0034380**

Dear Mr. Lawson:

On November 17, 2021, I performed a Compliance Evaluation 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. A copy of the inspection report is enclosed for your records.


Please refer to the “Summary of Findings” section of the attached inspection report and provide a written response for each violation that was noted. This case has been referred directly to the Office of Water Quality - Enforcement Branch for further review. City of Stuttgart should immediately initiate all actions necessary to resolve and correct the violations cited in the inspection report. Written notification of the corrective actions taken for the violations must be submitted within thirty (30) calendar days from receipt of this letter to the attention of Richard Healey, Office of Water Quality - Enforcement Branch Manager, at (501) 682-0640 or healey@adeq.state.ar.us. This written notification should include; but not limited to, photographs and/or copies of other documentation.

If I can be of any assistance, please contact me at Aaron.Baggett@adeq.state.ar.us or (501) 519-0464.

Sincerely,

A handwritten signature in black ink, appearing to read 'Aaron Baggett'.

Aaron Baggett
Inspector, Office of Water Quality
5301 Northshore Drive, North Little Rock, AR, 72118

 <p>ENVIRONMENTAL QUALITY</p>	OFFICE OF WATER QUALITY INSPECTION REPORT				
	AFIN: 01-00214	PERMIT #: AR0034380	DATE: 11/17/2021		
	COUNTY: 01 Arkansas	PDS #: 119128	MEDIA: WN		
	GPS LAT: 34.493700 LONG: -91.564478 LOCATION: Entrance				
FACILITY INFORMATION		INSPECTION INFORMATION			
NAME: Stuttgart Municipal Water Work LOCATION: 1011 W 10th Street CITY: Stuttgart, AR		FACILITY TYPE: 1 - Municipal INSPECTOR ID#: 142556 S - State FACILITY EVALUATION RATING: 1 - Unsatisfactory INSPECTION TYPE: Compliance Evaluation			
RESPONSIBLE OFFICIAL		DATE(S): ENTRY TIME: EXIT TIME: PERMIT EFFECTIVE DATE: 11/17/2021 11:30 13:30 3/1/2021 PERMIT EXPIRATION DATE: 2/28/2026			
NAME: / TITLE Tommy Lawson / Manager COMPANY: Stuttgart Municipal Water Works MAILING ADDRESS: 612 S College Street PO Box 130 CITY, STATE, ZIP: Stuttgart AR 72160 PHONE & EXT: / FAX: 870-673-8783 / EMAIL: stuttgartarwater@centurytel.net CONTACTED DURING INSPECTION: ***		FAYETTEVILLE SHALE RELATED: N FAYETTEVILLE SHALE VIOLATIONS: N INSPECTION PARTICIPANTS NAME/TITLE/PHONE/FAX/EMAIL/ETC.: Danny Wilson (Class IV/Advanced Industrial; Lic. #001938), Wastewater Plant Operator/(870) 674-4819/swsdept@d-c1.com			
AREA EVALUATIONS <small>(S=Satisfactory, M=Marginal, U=Unsatisfactory, N=Not Applicable/Evaluated)</small>					
S	PERMIT	S	FLOW MEASUREMENT	U	STORMWATER
M	RECORDS/REPORTS	S	LABORATORY	U	FACILITY SITE REVIEW
U	OPERATION & MAINTENANCE	S	EFFLUENT/RECEIVING WATER	S	SELF-MONITORING PROGRAM
M	SAMPLING	M	SLUDGE HANDLING/DISPOSAL	S	PRETREATMENT
**	OTHER:				
SUMMARY OF FINDINGS					
The following violations were noted at the time of the inspection:					
<ol style="list-style-type: none"> 1.) Non-compliance reports (NCR) have not been submitted with DMRs for effluent exceedances for the DMRs reported after July 2021. This is a violation of Part I, Section A and Part III, Section D, 6, A-C of the permit. NCRs must be submitted with each effluent exceedance. 2.) The following items violate Part II, Condition 6 of the permit (housekeeping): <ul style="list-style-type: none"> • Excessive foam at the paracetic acid contact chamber was bringing floating scum to the top of the chamber and depositing it on the outside of the chamber and on the ground. This is a REPEAT issue noted in past inspections. • The North Bio-Tower was leaking onto the facility grounds due to damaged concrete during the inspection. Sludge and supernatant must be remediated appropriately. • A trailer-mounted pump at the EQ basin intended to recirculate sludge to front of facility has discharged directly to the adjacent ditch due to broken pipes. • A small pile of sludge has been placed on the ground outside the west end of the travelling bridge filter building. 3.) The following items violate Part III, Section B, 1, A of the permit (O&M): <ul style="list-style-type: none"> • Check valves in the primary headworks pumps (“A” pumps) are malfunctioning, causing influent to be diverted directly to the EQ basin outside of significant rain events via the EQ (“B”) pumps. • The “A1” & “B3” headworks pumps were inoperable at the time of inspection. 					

Inspection Report: **Stuttgart Municipal Water Work**, AFIN: **01-00214**, Permit #: **AR0034380**

- **The east Sludge Digester has been inoperable for approximately 1.5 years.**
- **Due to the redirection of influent outside of significant rain events, the EQ Basin has excessive accumulation of sludge. This accumulation has led to the basin being over design volume as well as overflows at EQ Basin wet wells. This is a REPEAT issue noted in past inspections.**
- **Distribution arms in both Trickle Filters were stationary at the time of inspection.**
- **Distribution arms in both Bio-Towers had significant vegetation growth at the time of inspection.**
- **The Belt Press was inoperable at the time of inspection.**
- **The scraper drive in north Intermediate Clarifier is not functioning, and the clarifier shows signs of having gone septic (dark color, bubbles); the south Intermediate Clarifier shows signs of having gone septic to a lesser degree than the north Intermediate Clarifier**
- **One of the two Travelling Bridge Filters was inoperable at the time of inspection.**

4.) **The sample data for the composite sampling are incomplete. The contract lab is conducting a 6-hr composite; however, there is no aliquot information to demonstrate the sample was collected per the definition of composite (see Part IV). Additionally, the POTW has two Industrial Users (IU) and the timeframe selected by the contract lab may not capture representative discharges from these IU. This is a violation of Part III, Section C, 1 of the permit. Aliquot information must include exact time, flow, and sample volume.**

GENERAL COMMENTS

On Wednesday, November 17, 2021, an inspection was conducted with the inspection participant(s) listed above. The inspection consisted of a site assessment and a records review.

Site Assessment:

Treatment consists of automatic bar screen, grit removal, primary clarifiers (3), trickling filters (2), intermediate clarifiers (2), bio-towers (2), aeration basin, final clarifiers (2), traveling bridge filter (tertiary), liquid paracetic acid contact, post-aeration, flow measurement, and discharge to Outfall 001. An EQ basin is available for wet-weather flows to reduce hydraulic overloading of the treatment plant. Sludge from the clarifiers is routed to sludge digesters (2), sludge decanters (2), sludge tank, sludge conditioner/press, sludge drier, and storage in a sludge silo. Class A exceptional quality bio-solids are given to local farmers.

Multiple repeat O&M issues, including some ongoing issues, were noted for the treatment plant (see “Summary of Findings”), and the overall condition of the facility appears to have deteriorated since the previous inspection in December of 2019. Issues with the EQ basin noted in the 2019 inspection continue to be an area of concern. Influent has been routed to the EQ basin during normal weather conditions due to malfunctioning influent pump check valves and the “A1” influent pump being inoperable. This has led to the continued buildup of sludge/solids in the front portion of the of the EQ basin (a repeat issue), which now has significant vegetation growth at the surface (Photos 12-13). A temporary pump was placed at the EQ basin to recirculate sludge back to the front of the plant in an attempt to regulate sludge volume. However, the pipe below the pump was completely broken, and the flow patterns in the area showed that the pump had discharged directly into the adjacent ditch since the pipe had broken (Photos 14-16; area of complaint).


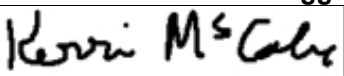
In addition to the EQ basin issues detailed above, the following issues with primary components of the treatment process were observed:

- The distribution arms in the trickle filters were not rotating, preventing the primary clarifier effluent from being spread on the filter media appropriately.
- Both intermediate clarifiers were showing signs of having gone septic, including dark color and bubbles at the surface. The west intermediate clarifier scraper drive is inoperable, which is allowing excess sludge to accumulate.
- Both sludge decanters were inoperable at the time of inspection.
- The East digester has not functioned in the past 1.5 years and has not been cleaned. As a result, significant vegetation is growing on the top of the sludge remaining in the digester.
- One of the Travelling Bridge Filters was inoperable at the time of inspection.

Records Review:

Records for April and Nov 2018 were requested and provided. Records were made available by the contract lab via email and are deemed organized and complete, unless otherwise noted. I was not provided the operator’s monthly flow sheet and I could not evaluate it for completeness. Additionally, complete composite sample data were not provided on COC. The contract lab is conducting a 6-hr composite (October and November 2021 from 03:00 to 09:00); however, there is no information regarding aliquots (e.g., 2-hr intervals, recorded flow, and sample volume) on the COC, and it cannot be demonstrated whether samples were collected proportional to flow or per the definition of “composite” in Part IV of the permit. The timeframes selected by the contract lab may not be representative of the nature and volume of the discharge as the city has two Industrial Users (IU) that may be conducting clean-up outside the selected timeframes. Overall, the contract lab is completing all the necessary documentation on COC for sample collection/analyses and for calibration of field meters.

It should be noted that the city has not submitted any Non-compliance Reports (NCR) after July of 2021 for effluent exceedances. A review of submitted DMR data from October – November 2021 revealed multiple effluent exceedances and no NCR were submitted to the Enforcement Branch. The city must submit NCR for each effluent exceedance.

INSPECTOR'S SIGNATURE:  Aaron Baggett	DATE: 1/28/2022
SUPERVISOR'S SIGNATURE:  Kerri McCabe	DATE: 2/14/2022

SECTION A: PERMIT VERIFICATION	
PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES:	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. ALL DISCHARGES ARE PERMITTED:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
SECTION B: RECORDKEEPING AND REPORTING EVALUATION	
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT	<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
a. DATES AND TIME(S) OF SAMPLING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
b. EXACT LOCATION(S) OF SAMPLING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
c. NAME OF INDIVIDUAL PERFORMING SAMPLING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
d. ANALYTICAL METHODS AND TECHNIQUES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
e. RESULTS OF CALIBRATIONS:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
f. RESULTS OF ANALYSES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
g. DATES AND TIMES OF ANALYSES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
h. NAME OF PERSON(S) PERFORMING ANALYSES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE:	<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR:	<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
SECTION C: OPERATIONS AND MAINTENANCE	
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED	<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS: <u>Bar screen/grit removal, primary clarifier (3), trickling filter (2), intermediate clarifier (2), bio-tower (2), aeration, final clarifier (2), tertiary sand filter (traveling bridge), paracetic acid contact chamber, post-aeration, and discharge to Outfall 001 with EQ basin available for wet-weather; sludge digester (2), sludge decant (2), sludge belt conditioner/press, sludge drier, and silo storage for Class A exceptional quality bio-solids (given to farmers).</u>	
1. TREATMENT UNITS PROPERLY OPERATED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
2. TREATMENT UNITS PROPERLY MAINTAINED:	<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED: <u>Onsite generators (3 at 380hp total).</u>	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
5. ALL NEEDED TREATMENT UNITS IN SERVICE:	<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED: <u>Two Class IV; One class II; One Class I</u>	<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED:	<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
9. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
10. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
11. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
12. IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
13. HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
14. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT: <u>Overflows at EQ basin due to sludge build-up in pond (REPEAT).</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
15. IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE

SECTION D: SAMPLING	
PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS	<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS: Operator measures flow only; contract lab for all other parameters. Rating is based on not having composite sample data from contract lab (i.e., flow and volume).	
1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT: No flow or sample volume data available for composite samples.	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. SAMPLE COLLECTION PROCEDURES ADEQUATE:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
a. SAMPLES REFRIGERATED DURING COMPOSITING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
b. PROPER PRESERVATION TECHNIQUES USED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
c. CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
7. IF MONITORING IS PERFORMED MORE OFTEN THAN REQUIRED ARE RESULTS REPORTED ON THE DMR:	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
SECTION E: FLOW MEASUREMENT	
PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED: Yes TYPE OF DEVICE: 8' rectangular weir w/ end contractions w/ staff gauge	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. CALIBRATION FREQUENCY ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. RECORDS MAINTAINED OF CALIBRATION PROCEDURES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
7. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
8. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
9. HEAD MEASURED AT PROPER LOCATION:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
SECTION F: LABORATORY	
PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS: Operator measures flow only; contract lab for all other parameters	
1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(B) FOR SLUDGES) :	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. QUALITY CONTROL PROCEDURES ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. DUPLICATE SAMPLES ARE ANALYZED \geq 10% OF THE TIME:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. SPIKED SAMPLES ARE ANALYZED \geq 10% OF THE TIME:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
7. COMMERCIAL LABORATORY USED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
a. LAB NAME: Arkansas Analytical, Inc.	
b. LAB ADDRESS: 8100 National Drive, Little Rock, AR 72209	
c. PARAMETERS PERFORMED: CBOD5, TSS, NH3-N, DO, FCB, TRC, Total Recoverable Cu, TP, NO3+NO2-N, pH, and WET.	
8. BIOMONITORING PROCEDURES ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
a. PROPER ORGANISMS USED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
b. PROPER DILUTION SERIES FOLLOWED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
c. PROPER TEST METHODS AND DURATION:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
d. RETESTS AND/OR TRE PERFORMED AS REQUIRED:	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE

SECTION G: EFFLUENT/RECEIVING WATERS OBSERVATIONS							
BASED ON VISUAL OBSERVATIONS ONLY						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS:							
OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER
001	NO	NO	NO	YES	NO	CLEAR	--
SECTION H: SLUDGE DISPOSAL							
SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS:							
1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY:						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503:						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: (E.G., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE):							
SECTION I: SAMPLING INSPECTION PROCEDURES							
SAMPLE RESULTS WITHIN PERMIT REQUIREMENTS						<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS:							
1. SAMPLES OBTAINED THIS INSPECTION:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
2. TYPE OF SAMPLE: <input type="checkbox"/> GRAB:__ <input type="checkbox"/> COMPOSITE:__ METHOD:__ FREQUENCY:							
3. SAMPLES PRESERVED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
4. FLOW PROPORTIONED SAMPLES OBTAINED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
7. SAMPLE SPLIT WITH PERMITTEE:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
SECTION J: STORM WATER POLLUTION PREVENTION PLAN							
STORM WATER MANAGEMENT MEETS PERMIT REQUIREMENTS						<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS: <u>Bio-towers have been damaged and are leaking directly to the nearby ground, leaving sludge and supernatant exposed to stormwater; broken trailer-mounted pump has discharged sludge from EQ Basin directly into an adjacent ditch.</u>							
1. SWPPP UPDATED AS NEEDED: <u>Yes</u> DATE OF LAST UPDATE: <u>3/4/2021</u>						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
2. SITE MAP INCLUDING ALL DISCHARGES AND SURFACE WATERS:						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
3. POLLUTION PREVENTION TEAM IDENTIFIED:						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
4. POLLUTION PREVENTION TEAM PROPERLY TRAINED:						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
5. LIST OF POTENTIAL POLLUTANT SOURCES:						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
6. LIST OF POTENTIAL SOURCES AND PAST SPILLS AND LEAKS: <u>SWPPP includes list of potential sources, but not past spills and leaks</u>						<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
7. ALL NON-STORM WATER DISCHARGES ARE AUTHORIZED:						<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
8. LIST OF STRUCTURAL BMPS:						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
9. LIST OF NON-STRUCTURAL BMPS:						<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
10. BMPS PROPERLY OPERATED AND MAINTAINED:						<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	
11. INSPECTIONS CONDUCTED AS REQUIRED:						<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE	

FLOW CALCULATION SHEET

Date: **11/17/2021** Time: **1240**

Head in Inches: Feet: **0.16**

Type & Size of Primary Flow Measurement Device: **8' rectangular weir w/ end contractions**

Name & Model of Secondary Flow Measurement Device: **Pulsar Greyline OCF 6.1 open channel flowmeter**

Date of last Calibration of Secondary Flow Device:

Recorded Flow at Date & Time Listed Above: **0.93 MGD** (Facility Flow Meter)

Calculated Flow at Date & Time Listed Above: **0.91 MGD**

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

% Error =	Recorded Value	-	Calculated Value	X 100
	Calculated Value			

% Error =	0.93	-	0.91	X 100
	0.91			

% Error =	.02	X 100
	.91	

% Error =	.022	X 100
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% Error =	2.2	%
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Comments: **Within ± 10%**

DMR Calculation Check

Reporting Period: From 2021 11 01 To 2021 11 30
 Year Month Day Year Month Day

Parameter Checked: TSS

	Loading Mass Mo. Avg. - lbs/day	Concentration Monthly Mo. Avg. - mg/l	7-day Avg. - mg/l
Reported Value:	<u>73</u>	<u>9.23</u>	<u>12.17</u>
Calculated Value:	<u>60</u>	<u>9.23</u>	<u>12.16</u>
Permit Value:	<u>437.9</u>	<u>15.0</u>	<u>22.5</u>

If calculated value does not equal reported value, explain:
Values aren't the same; used operator's daily flow; value is below reported & within permit limits.

Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Works		
Photographer:	Aaron Baggett	Date:	11/17/2021
Time:	1137	Witness:	Kerri McCabe
Photo #:	1	Description:	"A" primary pumps at headwaters of facility; high-flow conditions trigger EQ pumps to divert influent to EQ basin; A1 pump (on left) inoperable at time of inspection



Photographer:	Aaron Baggett	Date:	11/17/2021
Time:	1141	Witness:	Kerri McCabe
Photo #:	2	Description:	East primary clarifier



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Works		
Photographer:	Aaron Baggett	Date:	11/17/2021
Time:	1142	Witness:	Kerri McCabe
Photo #:	3	Description:	Two westernmost primary clarifiers



Photographer:	Aaron Baggett	Date:	11/17/2021
Time:	1148	Witness:	Kerri McCabe
Photo #:	4	Description:	West trickle filter below clarifiers; distribution arms were stationary in both of the trickle filters.



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Works				
Photographer:	Aaron Baggett	Date:	11/17/2021	Time:	1157
Witness:	Kerri McCabe			Photo #:	5
Description:	West intermediate clarifier showing signs of septic growth, including bubbles and dark color.				



Photographer:	Aaron Baggett	Date:	11/17/2021	Time:	1217
Witness:	Kerri McCabe			Photo #:	6
Description:	From top of southwest bio tower; distribution arms showing significant vegetation growth.				



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Works				
Photographer:	Aaron Baggett	Date:	11/17/2021	Time:	1214
Witness:	Kerri McCabe	Photo #:	7		
Description:	Leak in northeast bio-tower leaving significant pooling of wastewater on ground.				



Photographer:	Aaron Baggett	Date:	11/17/2021	Time:	1211
Witness:	Kerri McCabe	Photo #:	8		
Description:	Solids contact (aeration) basin below bio-towers.				



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Works				
Photographer:	Aaron Baggett	Date:	11/17/2021	Time:	1244
Witness:	Kerri McCabe	Photo #:	9		
Description:	North final clarifier				



Photographer:	Aaron Baggett	Date:	11/17/2021	Time:	1244
Witness:	Kerri McCabe	Photo #:	10		
Description:	South final clarifier				



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Work		
Photographer:	Aaron Baggett	Date:	11/17/2021
Time:	1313	Witness:	Kerri McCabe
Photo #:	11	Description:	Inoperable east sludge digester; significant vegetation growth at surface.



Photographer:	Aaron Baggett	Date:	11/17/2021
Time:	1253	Witness:	Kerri McCabe
Photo #:	12	Description:	EQ basin overview; facing southwest; corner of sludge drying pad in bottom left of photo.



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Work		
Photographer:	Aaron Baggett	Date:	11/17/2021
Witness:	Kerri McCabe	Time:	1257
		Photo #:	13

Description: **Sludge & water accumulation nearing the top of EQ Basin levee; significant vegetation growth at surface; trailer-mounted pump seen in top left of photo.**



Photographer:	Stuttgart Municipal Water Works	Date:	11/17/2021
Witness:	Kerri McCabe	Time:	1256
		Photo #:	14

Description: **Trailer-mounted pump intended to maintain EQ basin level.**



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Work		
Photographer:	Aaron Baggett	Date:	11/17/2021
Witness:	Kerri McCabe	Time:	1250
		Photo #:	15
Description:	Broken pipes below pump trailer at EQ Basin.		



Photographer:		Date:	
Witness:	Kerri McCabe	Time:	
		Photo #:	16
Description:	Flow indicators below pump and broken pipes indicate discharge into adjacent ditch.		



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Work		
Photographer:	Aaron Baggett	Date:	11/17/2021
Time:	1300	Witness:	Kerri McCabe
Photo #:	17	Description:	Washout and fluid accumulation below pump at EQ Basin.



Photographer:	Aaron Baggett	Date:	11/17/2021
Time:	1256	Witness:	Kerri McCabe
Photo #:	18	Description:	Water of uncertain origin pooling at northeast end of EQ basin; hose shown runs between sludge pump in EQ basin pump pit and sludge drying pad; facing west.



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Work				
Photographer:	Aaron Baggett	Date:	11/17/2021	Time:	1252
Witness:	Kerri McCabe	Photo #:	19		
Description:	Trailer-mounted pump and sludge piles from EQ Basin pump pit on drying pad.				



Photographer:	Aaron Baggett	Date:	11/17/2021	Time:	1252
Witness:	Kerri McCabe	Photo #:	20		
Description:	Sludge pile from EQ Basin pump pit on drying pad.				



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Work				
Photographer:	Aaron Baggett	Date:	11/17/2021	Time:	1232
Witness:	Kerri McCabe	Photo #:	21		
Description:	Inoperable travelling bridge filter; previously-accumulated sludge in bottom of filter.				



Photographer:	Aaron Baggett	Date:	11/17/2021	Time:	1231
Witness:	Kerri McCabe	Photo #:	22		
Description:	Operable travelling bridge filter.				



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Work		
Photographer:	Aaron Baggett	Date:	11/17/2021
Witness:	Kerri McCabe	Time:	1230
		Photo #:	23
Description:	Paracetic acid controller near travelling bridge filters.		



Photographer:	Aaron Baggett	Date:	11/17/2021
Witness:	Kerri McCabe	Time:	1230
		Photo #:	24
Description:	Paracetic acid container near travelling bridge filters.		



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Work		
Photographer:	Aaron Baggett	Date:	11/17/2021
Witness:	Kerri McCabe	Time:	1234
		Photo #:	25
Description:	Paracetic acid contact chamber; foam collecting throughout chamber.		



Photographer:	Aaron Baggett	Date:	11/17/2021
Witness:	Kerri McCabe	Time:	1240
		Photo #:	26
Description:	Rectangular weir for flow measurement.		



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Work		
Photographer:	Aaron Baggett	Date:	11/17/2021
Witness:	Kerri McCabe	Time:	1241
		Photo #:	27
Description:	Effluent sampler; automatic flowmeter shown in background.		



Photographer:	Aaron Baggett	Date:	11/17/2021
Witness:	Kerri McCabe	Time:	1240
		Photo #:	28
Description:	Automatic flowmeter reading 647.44 gpm at time of inspection.		



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Work		
Photographer:	Aaron Baggett	Date:	11/17/2021
Witness:	Kerri McCabe	Time:	1321
		Photo #:	29
Description:	Inoperable belt press; sludge from EQ basin shown in foreground is typically loaded onto belt press manually.		



Photographer:	Aaron Baggett	Date:	11/17/2021
Witness:	Kerri McCabe	Time:	1323
		Photo #:	30
Description:	Silo for storing Class A exceptional quality sludge; given to local farmers.		



Office of Water Quality Photographic Evidence Sheet

Location:	Stuttgart Municipal Water Work				
Photographer:	Aaron Baggett	Date:	11/17/2021	Time:	1324
Witness:	Kerri McCabe	Photo #:	31		
Description:	Small pile of sludge outside west-end of travelling bridge filter building.				



Figure 1. Schematic of the City of Stuttgart POTW, which was provided in the permit renewal application.

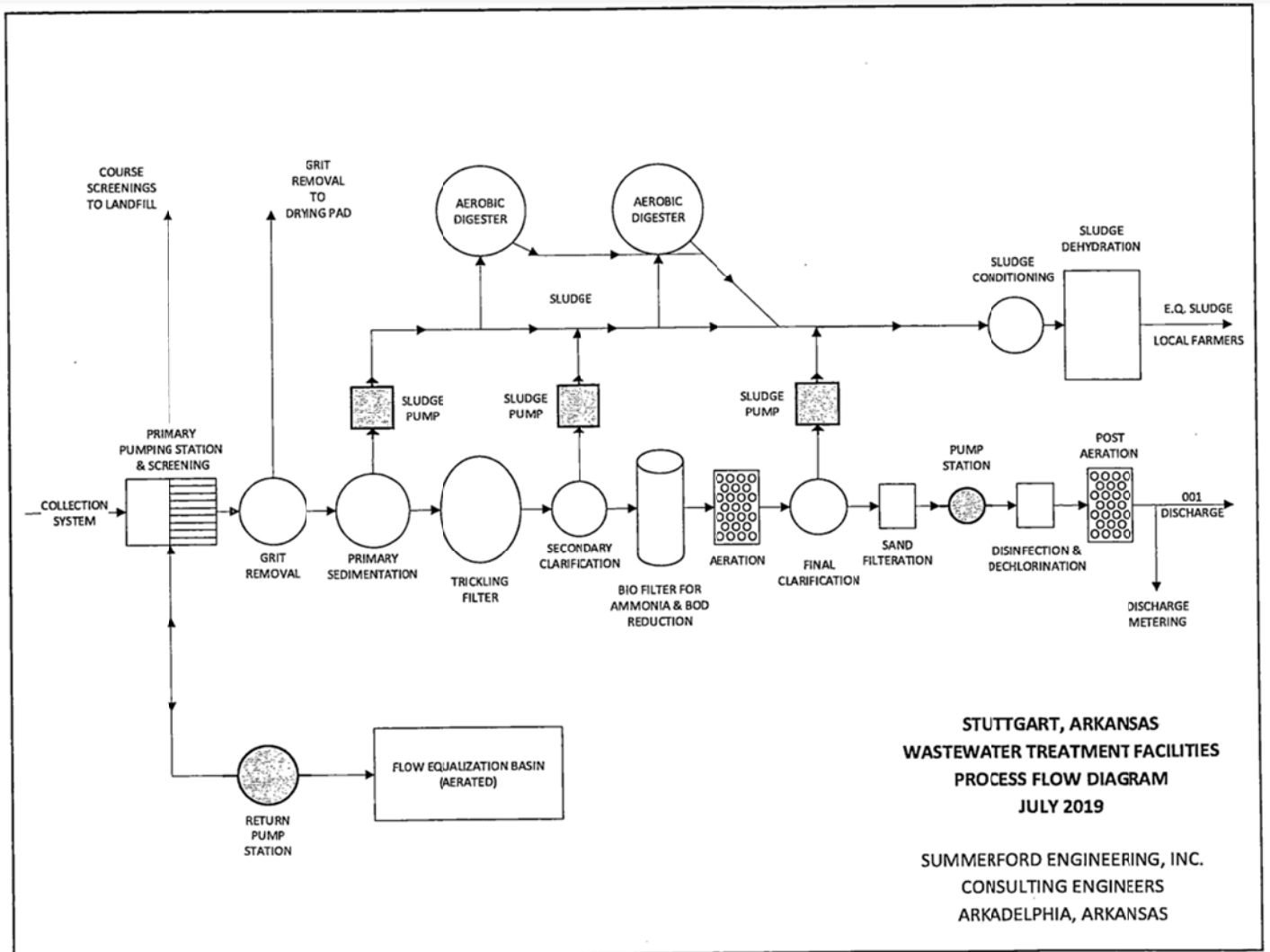


Figure 2. Google Earth image dated Nov 2020 depicting the City of Stuttgart POTW with major components identified. Red pins are components that are not in operation (NIO).



Figure 3. Google Earth image dated November 2020 depicting the City of Stuttgart EQ basin with major components identified.



Table 1: DMR accuracy check for NH3-N for October 2021 for City of Stuttgart.

October 2021				
NH3-N (three samples/week)				
Day	Concentration(mg/l)	7-Day Average (mg/l)	Flow(MGD)	Loading(lbs/day)
5	1.83	2.04	3.05	46.55
6	1.90		0.31	4.91
7	2.39		0.31	6.18
12	1.33	1.21	0.03	0.33
13	0.895		0.03	0.22
14	1.41		0.03	0.35
19	1.74	1.53	0.76	11.02
20	1.69		0.58	8.17
21	1.16		0.45	4.35
26	0.772	0.59	0.88	5.66
27	<0.500		1.07	4.46
28	<0.500		0.57	2.37

Table 2: DMR accuracy check for TSS for November 2021 for City of Stuttgart.

November 2021				
TSS (three samples/week)				
Day	Concentration(mg/l)	7-Day Average (mg/l)	Flow(MGD)	Loading(lbs/day)
2	4.00	12.16	1.15	38.36
3	14.5		1.09	131.81
4	18.0		0.89	133.60
9	8.50	8.83	1.07	75.85
10	9.50		0.78	61.79
11	8.50		0.78	55.29
16	6.50	7.33	1.01	54.75
17	7.50		0.2	12.51
18	8.00		0.2	13.34
22	5.00	8.5	0.79	32.94
23	8.00		0.96	64.05
24	12.5		0.39	40.65
30	9.5		0.78	61.79