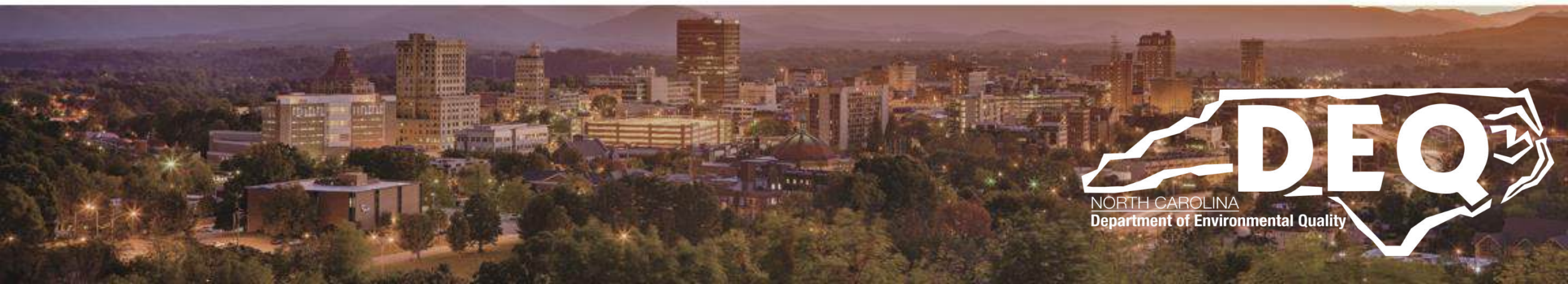




NPDES Inspection and Other "Stuff"

NCMA Annual North Carolina Water Quality Workshop, February 6 and 18, 2025

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Compliance and Reporting Topics

- eDMR questions and issues

Common eDMR Problems

- A delay in submitting information could result in monthly eDMR not being submitted on time. Late or missing reports raises red flags with EPA.
- Change of Ownership / Responsible Official / Delegation of Signatory Authority
 - <https://deq.nc.gov/about/divisions/water-resources/edmr/forms-and-reports>
 - Forms may need to be notarized.
- When ORC, Back-Up ORC, or other official separates from service, please deactivate their eDMR account.
 - <https://deq.nc.gov/about/divisions/water-resources/edmr/edmr-contacts>
 - You can also add users by the same method
 - Must be done by the responsible official on the account

Data Entry

- After a NPDES permit renewal is issued, please check the following before entering a monthly report into eDMR:
 - Are all parameters present?
 - Should new parameters be present according to permit?
 - Have some parameters been removed?
 - Are the correct sampling frequencies listed?
 - Are the correct units of measure being used?
- If you find any errors, please contact permitting and regional office staff so that corrections can be made.
- Failure to correct these items could lead to erroneous NOVs and possible enforcement actions.

Validation

- Please pay close attention to this step.
- This step can help you identify data that was entered incorrectly:
 - Missing a decimal – 99 instead of 9.9
 - Too many zeros – 100 instead of 10
 - Missing Data – only 4 TSS's for the week instead of 5
 - Data entered in the wrong column – temperature entered in the pH column
 - Missing a page – Upstream, Downstream, other internal outfalls
- Yes, there will always be warnings for split weeks.
- Please enter “H” in cells for holidays.

Certification

- This step must be completed by the ORC or Back-up ORC.
 - Make sure they have the correct type and grade ORC for the facility
 - Make sure their certifications are active
- Reasons for certifications being moved to invalid status include:
 - Failure to pay annual fee
 - Did not complete required continuing education requirements.
- Invalid status will create errors in the eDMR program

ORC and Back-Up ORC

- Please submit an updated ORC form to the Technical Assistance and Certification Unit anytime there is a change in the ORC or Back-Up ORC positions. This can affect the certification step in submitting monthly eDMR.
- The Back-up ORC can serve as the ORC for 120 days.
- In the event the ORC and Back-up ORC positions are vacated at the same time, the facility has 7 days to fill one of the positions.

Submission

- This step must be completed by Owner of the Permit or their designee.
- The owner must submit the delegation of signature authority forms granting others permission to submit.
 - <https://deq.nc.gov/about/divisions/water-resources/edmr/forms-and-reports>
- Please do not share log-in information with others. This information is specific to the submitter and is part of the electronic signatory agreements.
- If you allow someone else to log in and submit the report with your credentials, it is considered wire fraud and penalties are very similar to mail fraud.
- Once the report is submitted, the data will upload into DWR's system and you should receive a confirmation email.

Revised eDMRs

- If you need to revise an eDMR:
 - Log in
 - Search reports
 - Click revise-button on the right-hand side near the delete button
 - Select the page you need to revise and click edit page
 - Enter corrected data and save
 - Then follow normal submittal procedures:
 - Validate
 - Certify
 - Submit

Cybersecurity

- Please make sure your system is secure.
- Fayetteville Region example:
 - A county network was attacked and held for ransom
 - FBI recommended not paying
 - County had to rebuild system. Estimated time 2 weeks. Actual time 6 weeks.
 - Facility was late submitting eDMR. DWR knew it was going to be late and was in routine contact with the County.
- This late submittal caused the County WWTP to be on the EPA watch list. DWR and County had to explain this to the EPA
- Lesson learned:
 - If you cannot submit electronically due to a cyberattack-PLEASE submit a paper copy like we did in the past

To be prepared for an emergency, you should have....

- an environmental cleanup contractor list or service contract
- relevant contact info for plant staff 'in the know' about drains, chemicals, stormwater conveyances, etc.
- a clear understanding of your SW permit and SPPP
- knowledge of receiving stream class, location of downstream intakes, recreational areas, etc.
- a working relationship with local RO, EM, etc.
- available site maps with infrastructure detail
- ability to access all areas of facility in off business hours
- sufficient onsite materials to contain spills (plugs, SW inlet mats, etc.)
- sufficient management of secondary containment structures (e.g., drain valves)



General Emergency Preparedness To Do List

- ✓ Locate all floor drains and know where they discharge
- ✓ Test pumps and controls
 - Do you need the ability to rent pumps in an emergency?
 - Some rental companies will develop a plan based on your system. This plan will list what pumps you need, help you make electrical hookups, and determine what size pipes or hoses are needed.
- ✓ Test alarms and make sure they alert the correct people at the correct numbers
- ✓ Generators
 - When was the last time serviced?
 - Does the automatic transfer work?
 - Do staff know how to crank manually if needed?
 - Do you have a vendor fuel agreement?

Emergency Preparedness

- What if the RO loses power or closes due to an emergency, and you can't contact anyone to report issues to?
 1. Contact the NC Emergency Management Center 919-733-3300 or 800-858-0368
 - During emergency weather events, the call center can be busy, so...
 2. Contact another Regional Offices:
 - <https://deq.nc.gov/about/contact/regional-offices>
- Make sure to speak with a person and do not just leave a voicemail
- Record the name of the person you talked to and any incident tracking number they give you during the call

































Chlorine contact chamber with sludge



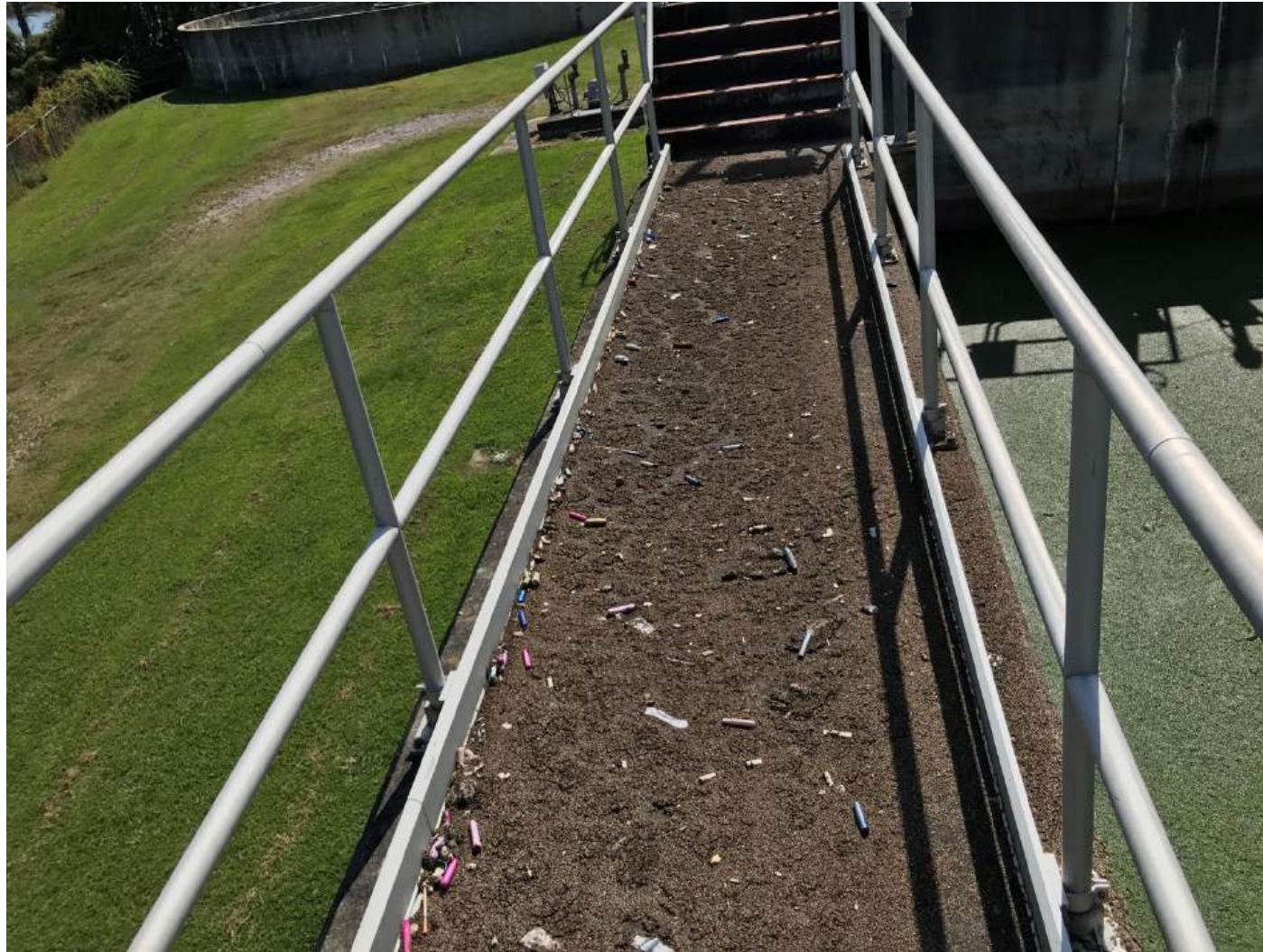
Grass growing in Clarifier



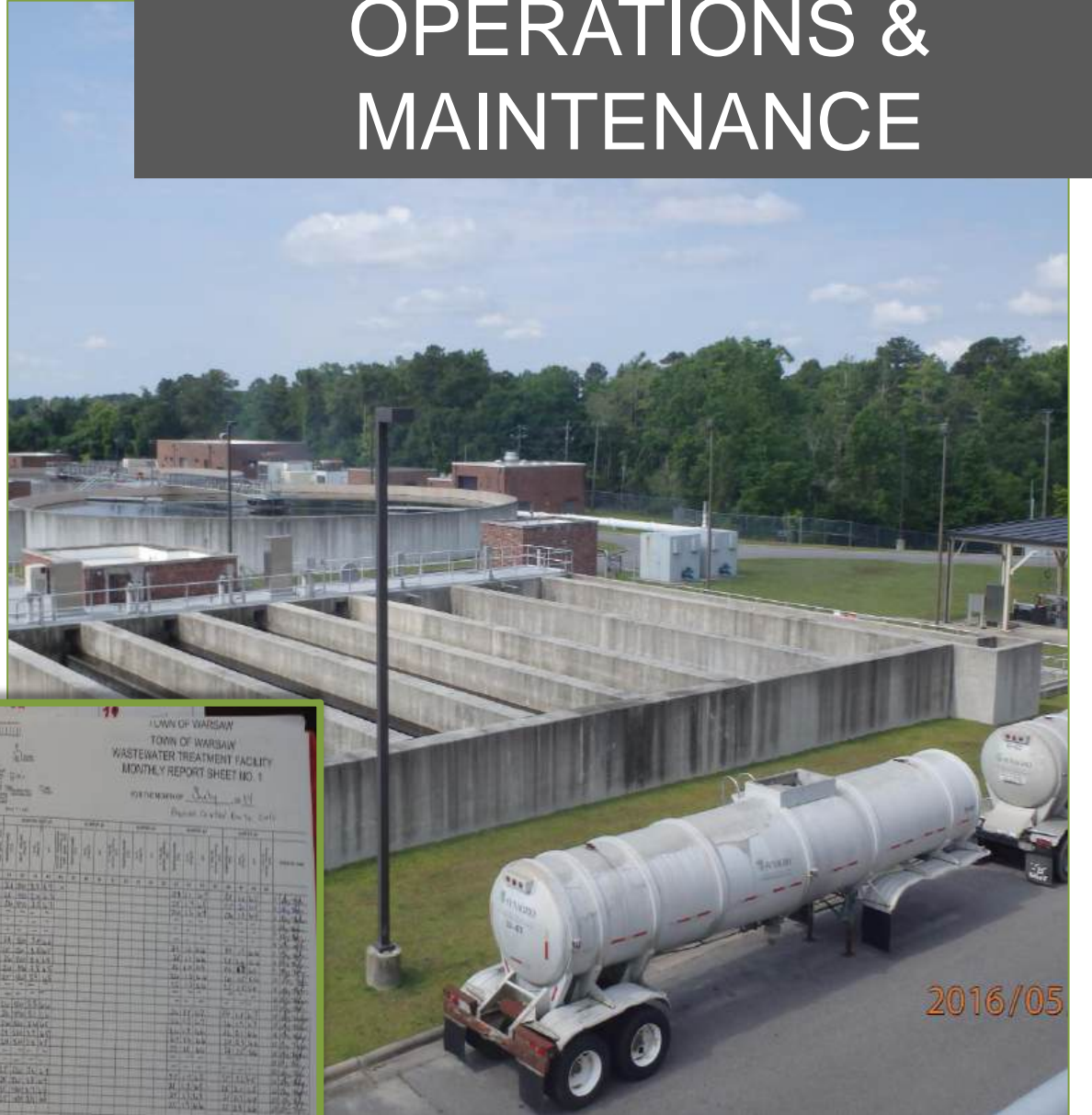
Grass growing in anaerobic basin



Trash on walkway from an unreported spill



OPERATIONS & MAINTENANCE



10

TOWN OF WARSAW
WASTEWATER TREATMENT FACILITY
MONTHLY REPORT SHEET NO. 1
OPERATOR: [Signature]
Report Cycle: [Signature]

DATE	TIME	METER NO.	FLOW RATE (MGAL)												TOTAL	UNIT PRICE	TOTAL CHARGE
			1	2	3	4	5	6	7	8	9	10	11	12			
2016-05-01	08:00	101	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

2016/05



Monitoring & Process Control
Self-Monitoring & Compliance Monitoring

Sampling & Measurements

- Compliance History of Discharge Monitoring Reports
- Appropriate Sampling Protocol
- Proper Analytical Methods
- Certified Laboratory
- Complete Records
- Meter Calibrations Performed



SOUTHPORT WASTE TREATMENT PLANT
pH WORKSHEET

ALL SAMPLES TESTED WITHIN 15 MINUTES OF COLLECTING, pH CHECKED WHILE STIRRING

Calibration Time: 0300 DATE: 5-25-15
3:00 AM

PH METER CALIBRATION		CAL. CHECK	CAL. CHECK	METER	
METER READING		W/pH 7	W/pH 4	W/pH 10	
		Results	Results	Results	
		+ or - 0.1 pH	+ or - 0.1 pH	+ or - 0.1 pH	
SAMPLES	TIME OF COLLECTION	COLLECTED BY:	TIME OF ASSAY	ASSAY BY:	pH RESULTS
REC	0300	MS	0300	MS	6.3
Q-902 EFF					7.1
Q902 BASIN					7.2
Q-905					5.7
Q905 COMP					5.6
Std. pH 10 Check (Nights)					10.0
Q908	0640	JC	0645	JC	8.13
Q908 DUP	0640	JC	0645	JC	8.13
B-901	1100	JC	1100	JC	7.92
B-902					7.89
B-904					7.43
Std. pH 10 Check (Days)	1121	JC	1122	JC	10.12

Calibrations

2015/06/

I-93A, Semi-Annual PM Tank Drop of Effluent Flow T-927 to River

PMID	Work Order Number	Date	Instrument Loop	Description
WTC-193A	47560	6-17-15	I-93A	Effluent Flow T-927 to River

1. PURPOSE

To perform Environmental Management System required Waste Water Treatment instrument calibrations containing the following instruments: FT-9022 and FCV-9022.

2. PREPARATION

Check with Production for availability.
Obtain Work Permit.

3. PROCEDURE

Task	Results	Init
A. Have Operator put control valve, FCV-9022 in MANUAL and CLOSED.	N/A	<i>[Signature]</i>
B. Have Operator stop flow from T-909 by placing all Effluent pumps (PT909-1, 2, & 3) in MANUAL and STOPPED. -Flow from T-909 will now overflow into T-904.	N/A	
C. Verify that all flow has stopped going into T-927.	N/A	
D. Verify that NO flow is going into T-927 overflow pipe.	N/A	
E. Verify the Bailey permissive to dump to the river.	N/A	
F. Verify "START FLOW METER VERIFICATION" is in the OFF mode.	N/A	
G. Measure and Record T-927 level from the RED datum point to the surface.	12 Ft	
	6 In	
H. Verify "START FLOW METER VERIFICATION" is in the ON mode.	N/A	
I. Verify Bailey FLOW METER VERIFICATION displays ZERO (0) Gallons.	N/A	
J. Manually OPEN T-927 discharge valve (FCV-9022) and START Timer.	N/A	
K. After Two (2) hours, CLOSE T-927 Discharge Valve (FCV-9022).	N/A	
L. Measure and Record T-927 Level from the red datum point to the surface.	19 Ft	
	7 In	
M. Record Bailey FLOW METER VERIFICATION Gallons.	353118	
N. Perform following conversions and calculations: Convert Line G to Inches: <u>150</u> Convert Line L to Inches: <u>235</u> Subtract Line L from Line G: = <u>-85</u> Inches Multiply difference by 3921.3: = <u>33310</u> Gallons		+19808 Gals
O. Have Operator put all controls back in Automatic.	N/A	<i>[Signature]</i>

What do I find?

- A well managed facility

Or...

- Misunderstanding of treatment process and control
- Poor sampling protocol
- Deferred maintenance
- Aging and failure of treatment components
- System design issues and limitations
- Operator/staff apathy





















- Just when you think you have seen it all-----



