WWOA
Virtual Operator Training Series

- April 30th  Activated Sludge  9am – Noon
- May 6th  Anaerobic Digestion  9am – Noon
- May 14th  Collection System Long-Range Planning  9am – Noon
- May 21st  WI DNR Updates  11am – 1pm
- May 26th  Water Quality Trading  9am – Noon
- June 4th  Submersible Pump O&M  9am – Noon
- June 10th  Biosolids Handling Case Studies  9am – Noon
- June 18th  Process Control  9am – Noon
Webinar Meeting Details

Welcome from the WWOA, thank you for continuing your education with us during these historically unique times.

- Find the chat function, you will need that to answer simple questions designed to confirm that you are still participating.
  - This is necessary to get credits.
- Breaks will be 5 minutes, we will start promptly following each break.
- Questions can be asked through the Q&A feature, we will check in on them periodically.
- A short survey will be included at the conclusion.
  - We need feedback to improve this approach to continued educational opportunities.

The content of this presentation is intended for the sole purpose of educating WWOA members and is not to be downloaded, copied, used, shared, or otherwise transmitted without the prior consent of WWOA and the authors.
Introductions

Amy Garbe

Amy Garbe is a Wastewater Engineer with the Department of Natural Resources. Previously she handled compliance within the Southern part of the state along with AM/WQT projects and Phosphorus Variances statewide. Recently, she transitioned to the Statewide Wastewater Operations Engineer and Compliance Coordinator position in which she works statewide assisting with O&M Troubleshooting, Operator Certification, SSOs and CMARs.
Wisconsin DNR Updates

Hosted by WWOA
Presented by Amy Garbe, WDNR
05/21/2020
Staffing Updates
Staffing Updates

NORTHERN

Jordan Englebert – Compliance Engineer

Lonn Franson – Compliance Engineer (retiring)
Staffing Updates

WEST CENTRAL

Geisa Thielen – Field Supervisor

VACANT – Compliance Engineer
Staffing Updates

NORTHEAST

Heidi Schmitt-Marquez – Field Supervisor

Laura Gerold – Compliance Engineer
Staffing Updates

SOUTHEAST

Jacob Wedesky – Compliance Engineer

Steve Warrner – Land Spreading Specialist
Staffing Updates

SOUTH CENTRAL

Tom Bauman – Field Supervisor

Thomas Meronek – Compliance Engineer

Kassie Franke – Land Spreading Specialist
Staffing Updates

CENTRAL OFFICE - MADISON

Ashley Brechlin – Plan Review Engineer

Chris Bellovary – Plan Review Engineer (leaving)

Richard Douglas – Land Spreading Specialist
Permit Compliance

CMAR Season
SSO Forms
Inspections
CMAR Season

- Released April 30th

- Reminder: review generated data first

- Updated instructions: https://dnr.wi.gov/topic/wastewater/cmar/SectionInstructions.html

- Updated precipitation data: https://dnr.wi.gov/topic/wastewater/cmar/Precipitation.html

- New due date (this year only) = August 31, 2020
SSO Forms

•Submitted for Sanitary Sewer Overflows (SSO) & Treatment Facility Overflows (TFO) [https://dnr.wi.gov/topic/wastewater/documents/3400-184.pdf]
  – Required within 5 days of overflow occurrence
  – Sent to compliance staff

•Moving to electronic submittals
  – Development of central email address (DNRSSOForms@wisconsin.gov)
  – Date TBD

•Basement Backup Reporting – SSO Form vs CMAR

•Public Notification
  – always required (s. NR 210.21(5), Wis. Adm. Code)
  – Per Emergency Response Plan in CMOM
  – IF goes to surface water, minimum newspaper notification
Inspections

• What are the DNR goals?
  – Minors: 1x every 5 years
  – Majors: 1x every 2 years
  – Pretreatment Audits (delegated POTWs): 1x every 5 years

• DNR currently has travel restrictions
  – Anticipating a phased in approach

• “Virtual” Inspections until travel is allowed
E. coli Rule
**E. coli Rules**

- Revised our bacteria WQ criteria from fecal coliform to *E. coli*
- Developed by EPA to protect recreation
- Took effect May 1

Contains:
- Surface water criteria (NR 102)
- Permit limits for sewage treatment operations during recreation season (NR 210)
- Update to analytical methods table (NR 219)
- Removal of fecal coliform variances for Milwaukee area streams (NR 104)
Revisions to Effluent Limits for Sewage Treatment Works (NR 210)

• New *E. coli* limits: In any calendar month:
  - Long-term limit: Monthly geomean of 126 counts/100 mL
  - Short-term limit: No more than 10% of values above 410 counts/100 mL

• Previous fecal coliform limit
  - Long-term limit: Monthly geomean of 400 CFU/100 mL
  - No short-term limit
Communication with Facilities

• During rulemaking, we emailed all sewage treatment plants that disinfect during the economic solicitation period and the public comment periods

• Municipal Environmental Group reviewed rule & provided comments

• Talked with WI Rural Water Association to see if they’d be willing to host training on analytical methods at a statewide meeting

• Email going out by end of the week to all sewage treatment plants that disinfect with basic rule information and effective date
## Monitoring Requirements and Limitations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Limit Type</th>
<th>Limit and Units</th>
<th>Sample Frequency</th>
<th>Sample Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fecal Coliform</td>
<td>Geometric Mean - Monthly</td>
<td>400 #/100 ml</td>
<td>Current</td>
<td>Grab</td>
<td>Interim limit effective until the final <em>E. coli</em> limit goes into effect</td>
</tr>
<tr>
<td><em>E. coli</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Monitoring only until the final limit goes into effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Grab</td>
<td>Final Limit</td>
</tr>
<tr>
<td><em>E. coli</em></td>
<td>% Exceedance</td>
<td>10 Percent</td>
<td>Monthly</td>
<td>Calculated</td>
<td>Final Limit</td>
</tr>
</tbody>
</table>
Compliance Schedule

- Initially *E. coli* data is not readily available

- Provide flexibility BUT ensure compliance “as soon as possible”

- The schedule was written to capture three phases:
  1. Data Collection and Operational Evaluation
  2. Initiate Operational Improvements
     And if needed,
  3. Construction Upgrades
Compliance Schedule

<table>
<thead>
<tr>
<th>Schedule Action Item</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Status Update</td>
<td>In preparation of E. coli monitoring, within the DMR comment section, a facility should document steps taken in preparation for monitoring and testing for E. coli.</td>
</tr>
</tbody>
</table>
| #2 Operational Evaluation Report | The report should include:  
1. An evaluation of collected effluent data  
2. Proposed operational improvements  
3. Implementation timeline |

- If Report concludes that the operational improvements are expected to result in compliance with the final limits, the permittee shall comply within 12-19 months of permit reissuance.

- If Report concludes that operational improvements alone are not expected to result in compliance with the final limits, the permittee shall initiate development of a facility plan for meeting final limits within 48-58 months of permit reissuance.
## Compliance Schedule

<table>
<thead>
<tr>
<th>Schedule Action Item</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>#3 Submit Facility Plan</td>
<td>Submittal of either a full Facility Plan or an abbreviated facility plan depending on the complexity of the upgrades proposed.</td>
</tr>
<tr>
<td>#4 Final Plans and Specifications</td>
<td>Submittal of final construction plans to the Department for approval.</td>
</tr>
<tr>
<td>#5 Treatment Plant Upgrade to Meet Limitations</td>
<td>Initiation of bidding, procurement, and/or construction of the project</td>
</tr>
<tr>
<td>#6 Construction Upgrade Progress Report</td>
<td>A simple progress report on construction upgrades</td>
</tr>
<tr>
<td>#7 Complete Construction</td>
<td>Construction should be completed</td>
</tr>
<tr>
<td>#8 Achieve Compliance</td>
<td>Compliance with final E. coli limitations</td>
</tr>
</tbody>
</table>
What Improvements?

• Operational Improvements:
  – Increase chlorine chemical addition
  – Clean lamps & bulbs more often
  – Increase UV intensity

• Improvements Requiring Plans & Specs:
  – Additional tankage for either increased chlorine contact time or additional UV equipment
  – Additional/Upgraded UV Equipment
  – Switch from chlorine disinfection to UV disinfection
  – Additional pumps for chemical addition
Helpful Tips

• Test Method Fact Sheet

• Bacteria hold time = 8 hours (NR 219.04(2) Table F, Wis. Adm. Code)

• Year Round Disinfection – Can select \( E. coli \) limits to be effective year round OR receive both fecal and \( E. coli \) limits

• \( E. coli \) sampling – recommend starting now
Question: What test method do you use for fecal/E. coli testing?
5 Minute Break

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ENVIROTECH EQUIPMENT

Robert E. Lee & Associates, Inc

Wisconsin Pump Works
Fluid Handling Professionals
Lab Updates
Lab Updates

• Proposed NR 149, Wis. Adm Code Changes
  – Postponed until March 1, 2021 with an effective date of September 1, 2021
  – New NR 129 training session will be provided beforehand
  – 6 month transition date to meet new requirements

• PFAs
  – Lab certification still in the works, earliest July 2020
  – In the meantime, use available list
    https://dnr.wi.gov/topic/Contaminants/Labs.html
Lab Updates

• Communication
  – Going to GovDelivery, automatically signed up, you can opt out
  – Any changes to lab cert contacts, please contact Tom Trainor ASAP
  – DNR is changing look/function of website early summer, information not available contact Tom Trainor
  – Survey going out to ALL facilities who utilize chlorine or other halogens for disinfection to help access training needs

• Annual Due Dates
  – Environmental Fee Invoices – EMAILED this week (May 18\textsuperscript{th}) and due within 30 days
  – Proficiency testing (PT) due by August 15, 2020
Lab Updates

• Miscellaneous
  – All on-site audits are on hold due to COVID-19
  – John Condron has retired
  – If using HACH TNT kits for TP or NH3, remember to neutralize before analyzing
  
  – Any concerns on initial or ongoing MDLs, contact auditors or Tom Trainor
  – Lab cert want to hear from you! How can they help you? What questions do you have? Training needs (webinars or materials)?

Tom.Trainor@wisconsin.gov
Mobile: (920) 412-5970
TMDL Updates

Wisconsin River
Upper Fox/Wolf
Northeast Lakeshore
TMDL Basics: 101

For more information about any of the TMDLs:

Look for a red mail icon on the TMDL webpages to subscribe for email or text updates about these stakeholder meetings and comment periods.

https://dnr.wi.gov/topic/tmdls/
TMDL Basics: 101

- **TMDL** = Total Maximum Daily Load

- Established under the Clean Water Act

- Maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards
Wisconsin River TMDL

- Pollutants = TP

- TMDL approved by EPA on April 26, 2019

- TP limits expressed as 6-month and monthly avg limits [lbs/day]

- SSC for Lakes Castle Rock, Pentenwell, and Wisconsin passed JCRAR and expected to be effective June 1

- Limits based on SSC will not be in permits until after EPA approval
Upper Fox/Wolf TMDL

- Pollutants = TP & TSS

- TMDL approved by EPA on February 27, 2020

- Permits in the TMDL will now be given TMDL based limits upon reissuance

- TP limits expressed as 6-month and monthly avg limits [lbs/day]

- TSS limits expressed as monthly and weekly avg limits [lbs/day] for POTWs
Northeast Lakeshore TMDL

- Pollutants = TSS & TP

- Currently the watershed model is in development to calculate baseline loading of phosphorus and sediment.

- In-person stakeholder meetings were planned for this spring, however they had to get canceled because of COVID-19. These meetings will be rescheduled (no dates yet).

- Purpose of meetings: Introduce project, present WQ data, and present watershed model inputs to stakeholders.

- Facility draft load allocations are expected by early-to-mid 2021.
TMDLs Next in Line

- Lake Mallalieu
- Fox (IL) River Watershed
- Sugar-Pec Watersheds
- Black River Watershed

For more information about any of the TMDLs:
COVID-19 Impacts
DNR Compliance Assistance Website  
https://dnr.wi.gov/emergency/COVID19Compliance.html

Wisconsin Department of Natural Resources
COVID-19 ENVIRONMENTAL COMPLIANCE PROCESS

**EMERGENCIES**  
Contact the DNR immediately if there is an imminent or actual danger or threat to human health or the environment.  
**Call 1-800-943-0003 • select #1**  
As part of DNR’s response, staff will initiate a request for compliance assistance, where applicable, once the threat is addressed.

**NON-EMERGENCIES**  
If there is no threat or danger, request Pre-Approval for Compliance Assistance:

**FIRST**  
Email DNR point-of-contact to submit a request.

**IF**  
If a confirmed DNR contact is not established...

**THEN**  
Submit DNR’s online form:  
www.surveymonkey.com/r/WDNRCmplAssist

The DNR will evaluate requests on a case-by-case basis.

The DNR will work as quickly as possible on a solution in response to the compliance assistance request.  
**Do not implement alternative methods until receiving DNR written approval.**
Operator Certification

- Temporarily suspended ch. NR 114 Wis. Adm. Code requirements for renewal and continuing education deadlines

- Department extending the deadline to renew certifications to November 1, 2020

- **Online training** available – check training calendar and preapproved list

- May 6th Exams Cancelled – August exams planned to be held statewide

- WI Rural Water has list of certified operators

- Operator-in-Charge (OIC) can remotely oversee operations – IF NEEDED
Operator Certification

- “New” Subclasses
  - N - Nutrient Removal – Total Nitrogen
  - Applies only to those facilities with TOTAL NITROGEN LIMITS

  - A5 – Biological Treatment – Anaerobic Digestion
  - Applies only to those facilities with anaerobic LIQUID treatment, not biosolids

  - SS – Sanitary Sewer Systems
  - Applies to all WWTPs with collection systems
Operator Certification

- **Online Renewal**
  - OpCert Website Renew or Exam page

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**Renew**

Operator certifications come up for renewal every three years. DNR sends courtesy renewal reminder letters to operators six weeks before their certification expiration date. It is important for operators to **keep their address current** by notifying their regional coordinator of any changes. The letter serves as a courtesy reminder only; it is the operator's responsibility to keep track of their certification expiration date. When the operator is ready to renew, they should mail in the courtesy reminder letter, their continuing education documentation, and the $45 renewal fee to:

WI DNR
Operator Certification Program - EA/7
PO Box 7921
Madison WI 53707-7921

The renewal materials must be postmarked by the expiration date on the certificate (there is no grace period). Any renewal postmarked after the expiration date should also include the $25 late penalty fee.

Once a certification expires, an operator has one year from their expiration date to reinstate their lapsed certification. An operator is NOT considered a certified operator during this lapse of certification. If a certification is not renewed within that one year time period, the operator will need to re-take the exams as a new operator.

- [Environmental Licensing and Certification Online Renewal Portal](https://dnrx.wisconsin.gov/elcrenewal)
Environmental Licensing and Certification Online Renewal Portal

Welcome to the Department of Natural Resources online licensing and certification renewal portal. It is now easier and faster than ever to renew your license or certification. Instead of paying by check or money order, you now have the convenience of paying online with a credit or debit card.

The portal can be used for the following renewal types:

- Wastewater Operator certification
- Municipal Waterworks Operator certification
- Small Water System Operator certification
- Well Driller licenses and registrations
- Pump Installer licenses and registrations
- Rig Operator registrations

To renew your license or certification online, you must have your license/certification number to access the portal. The following conditions must be met before a license or certification is eligible for renewal:

- Continuing Education Credit (CEC) requirements are complete
- The license/certification expires in two months or less
- The license/certification is in good standing
- The license/certification cannot be beyond the expired grace period

Operators with multiple licenses and shared credits contact us before renewing.

Let’s get started >>
Question: What topics would you specifically like to hear or have a training on from the DNR?

Question: Any topics that you would like to have a fact sheet or handout developed for?
QUESTIONS

Amy.Garbe@wisconsin.gov
Mobile: (608) 716-9968
The End – Thank you!

Wisconsin DNR Updates Virtual Operator Training ~ May 21, 2020

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