

SUBJECT: Presentation of the 2014 Laboratory of the Year Award**FOR:** February 2014 Board meeting**TO BE PRESENTED BY:** Steve Geis, Chief of Environmental Science Services Section**SUMMARY:**

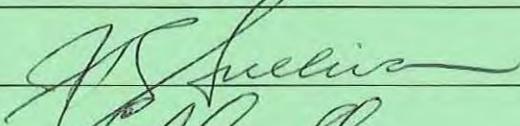
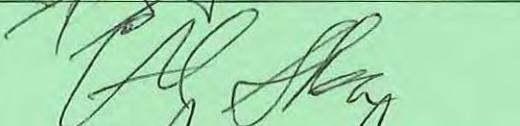
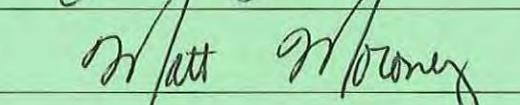
The Department annually presents the registered Laboratory of the Year Award to recognize Wisconsin's best registered laboratories for their outstanding commitment to producing high quality data. Registered laboratories perform testing solely on behalf of their own facility or municipality, or a subsidiary or corporation under common ownership or control. This is the 19th year we will present a Laboratory of the Year Award. There are over 200 registered laboratories that were eligible to win the award this year.

The 2014 Registered Laboratory of the Year Award will be presented to Wolf Treatment Plant in Shawano, WI.

The nomination papers, along with an overview of award selection criteria are included in the attached memorandum.

RECOMMENDATION: Information only**LIST OF ATTACHED MATERIALS (check all that are applicable):**

- Background memo Type name of attachment or type N/A if not applicable
 Type name of attachment or type N/A if not applicable Type name of attachment or type N/A if not applicable

Approved by	Signature	Date
John R. Sullivan, Bureau Director		1/15/2014
Al Shea, Administrator		1/17/14
Cathy Stepp, Secretary		1/28/14

cc: Board Liaison – AD/8



2014 Wisconsin DNR Registered Laboratory of the Year Instruction and Nomination Forms

The Wisconsin Department of Natural Resources is asking for nominations for registered laboratories that are worthy of receiving the prestigious “Registered Laboratory of the Year (LOY)” award. This award is presented annually* in order to recognize registered laboratories for their outstanding commitment to producing high quality data.

Notes:

- Nominees for the award must be registered laboratories located in the State of Wisconsin.
- Certified laboratories are not eligible and therefore will not be considered.
- Laboratories may be nominated multiple times and can win the award more than once.
- A LOY awards committee will choose the winner.
- Nominations can be made by anyone with the exception that laboratories may not nominate themselves.
- The audit report from the most recent WI DNR laboratory evaluation will be used as part of the nomination package.

Nominating a registered laboratory for the 2014 Laboratory of the Year Award:

1. Complete the Nomination Form presented on the next two pages of this document.
2. Write a summary describing the reasons why you are nominating the laboratory. In the summary, please address the questions asked. Answers to these questions will be used in choosing the winner. Each question may not apply to all labs. If a question does not apply then it does not need to be answered. Please limit the summary to two pages or less.
3. Please submit the completed Nomination Form to Tom Trainor by **December 4, 2013** to:

By mail Wisconsin DNR
Laboratory of the Year Award
c/o Tom Trainor
2984 Shawano Avenue
Green Bay, WI 54313

By email tom.trainor@wisconsin.gov

By fax 920.662.5159

* The Laboratory Certification and Registration Program reserves the right to decide if awards will be issued or not.



**2014 Wisconsin DNR
Registered Laboratory of the Year
Nomination Form – Lab Data Sheet**

Due December 4, 2013

Name of Laboratory	Wolf Treatment Plant Laboratory
Laboratory Manager	David Hartmann
Key Laboratory Employees	John Collins, Dustin Beyer, Nick Bartz
Laboratory Address	North 4802 River Bend Road, Shawano, WI 54166
Laboratory Phone Number	(715)524-2176
Nominator (your name)	Tom Trainor
Your Affiliation with Laboratory	Auditor
Your Address	2984 Shawano Avenue, Green Bay, WI 54313
Your Phone Number	920-412-5970
Your Email Address	Tom.trainor@wisconsin.gov
Is a 1-2 page summary attached that answers the questions asked on the next page?	yes

Nomination Form – Question / Answer sheet for the WDNR 2014 Laboratory of the Year Award:

Please provide an answer for each one of the questions listed below (unless it is not applicable)

Limit your reply to these questions to 2 pages

1. Quality Control

Discuss the laboratory's Quality Control (QC) system. Be sure to include the frequency of quality control samples, QC acceptance criteria, and how the lab uses QC results to improve the laboratory. Describe how frequently the lab has QC failures and what actions they take to address them.

- TP initial calibrations are performed at least quarterly
- Five different concentration standards are used in the TP calibration curve while only 3 are required.
- Each TP curve is graphed in order to obtain a visual display of how well the curve fits a line. This is not required.
- ICV standards are analyzed for TP even though they are not required because the laboratory analyzes QCS samples.
- ICV standards are performed at 3 different concentrations
- An excellent QA program is well established and adhered to
- All calibrations are very well done and all wide bore pipettes are a high volumetric class grade pipette.
- Replicates are performed even though they are not required
- Two BOD blanks are analyzed when only one is required.
- Quarterly blind samples are performed even though they are not required
- Three different buffer solutions are used to calibrate the pH meter instead of two. Fresh buffers are always used.
- The pH meter slope is always recorded and evaluated against the acceptable slope criteria.
- Zero significant deficiencies were identified at their last audit (2013). This makes two audits in a row (2009) without any significant deficiencies identified.
- The system to track QC failures is very well done. First, when a QC failure occurs, it is highlighted on the benchsheet with a colored highlighter marker so that it can be easily noticed during a review. Then, a corrective action form is completed and it is stapled to the benchsheet. This corrective action form is an orange colored form so they are easily detected when leafing through piles of paperwork. Lastly, all corrective actions require supervisor sign off so that the lab supervisor is well aware of all out of control situations and he can assess whether or not the corrective action taken is appropriate and he can assess any trending and/or impact on the data. With all of these checks and balances in place it is highly unlikely that an out of control sample will be missed on the DMR and that out of control situations are allowed to continue without being addressed.

2. Record-keeping

Discuss the systems and procedures the lab uses to ensure excellent records are maintained. Be sure to describe the lab's process for tracking analytical data, reagents/standards, equipment maintenance, and corrective actions in addition to their general practices.

- Laboratory records were very well organized for easy retrieval
- Procedures are well established and documented
- DMR qualification is very well done (the system to track qc failures includes a supervisor sign-off)
- The laboratory has a very detailed and inclusive list of maintenance items that are assessed weekly.
- LOD studies were well documented
- Very thorough corrective actions were taken and recorded in response to QC issues
- Benchsheets contained all of the required information for traceability. The chemicals used for each analysis are identified in detail for traceability on each benchsheet.
- The chemicals tracking documentation is superbly done. As received chemicals are tracked electronically.
- Prepared chemicals are tracked electronically and on paper.
- IDC are well established and perfectly documented.
- In general, the laboratory has many, many forms that document all aspects of their operations from plant monitoring, to sampling, through laboratory operations.

3. Quality Manual/Standard Operating Procedures (SOPs)

Describe the laboratory's Quality Manual and SOPs and how they are utilized. Detail how often they are updated and how tailored they are to what is actually done in the laboratory.

- The Quality Manual and Method SOPs are written to mirror the requirements listed in the new code – so it is crystal clear that the code requirements have been met. An excellent revision history is used to track changes.
- Method SOPs were also created for pH, residual chlorine and fecal coliform even though not required.
- The method SOPs are excellently written and organized providing all of the necessary details.

4. Other Practices

Describe any other practices the laboratory follows that improves their lab performance and the quality of the data they are generating. Discuss why this laboratory deserves the Laboratory of the Year award.

- The laboratory is very neat, clean, and organized
- The barometer is verified frequently
- The DO probe thermistor is used to measure room temperature and it is calibrated monthly
- TSS and BOD are analyzed on the influent and effluent 7 days a week even though only 5 days a week are required
- The BOD sample DO saturation process generates IDO's just where they should be, consistently
- DO depletion is assessed after the seed contribution has been subtracted out
- BOD and TP glassware are acid cleaned after each use
- Composite samplers are thoroughly cleaned after each use and disinfected once a week
- Composite sampler cleaning container blanks are performed annually
- The analyst was very easy to work with and willing to make any changes we thought may help improve the lab
- The analyst has a very good understanding of the tests he is performing
- The analyst pays good attention to detail and is very conscientious about the work he and his employees are performing
- The analyst communicates frequently with the DNR to make sure the things he is doing are ok
- The lab changes the DO membrane every 2 weeks as part of their routine maintenance.
- The lab treats its process samples like compliance samples and performs the extra required tests on them
- A timer is used to measure the time from color reagent addition to the time of absorbance measurement for TP samples so that as much consistency as possible is maintained in having all measurements made at about the same time in the color reaction.
- It is very hard for a laboratory with multiple analysts to be consistent with their testing protocols and documentation. Dave has spent many hours troubleshooting and training three other analysts so that consistency is achieved. The analysts all go through a complete rotation so they stay current with the testing. The analysts and Dave are very close so they often meet to discuss laboratory improvements or any issues that may come up.