

Wisconsin Department of Natural Resources
Natural Resources Board Agenda Item

SUBJECT: Legislative Audit Bureau's audit of Wastewater Permitting and Enforcement

FOR: June 2016 Board meeting

TO BE PRESENTED BY: Pat Stevens, Environmental Management Division Administrator

SUMMARY:

On June 3, 2016 The Wisconsin Legislative Audit Bureau (LAB) released its audit of Department of Natural Resources Wastewater Permitting and Enforcement Programs. This review included permitting and oversight of municipal wastewater treatment plants, industrial wastewater treatment facilities, and large livestock farms known as concentrated animal feeding operations (CAFOs) by the Department of Natural Resources (DNR) from 2005 through 2014.

This presentation will provide an overview of that audit.

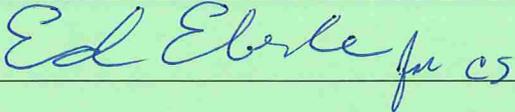
The Legislative Audit Bureau Audit may be viewed online at: <http://legis.wisconsin.gov/lab/reports/16-6full.pdf>

RECOMMENDATION: Information Only

LIST OF ATTACHED MATERIALS (check all that are applicable):

- Background memo
- DNR Audit Response Letter

- Type name of attachment if applicable

| Approved by | Signature | Date |
|--|--|---------|
| N/A | | |
| Pat Stevens, Environmental Management Division Administrator |  | 6/10/16 |
| Cathy Stepp, Secretary <i>for</i> |  | 6/10/16 |



June 2, 2016

Mr Joe Chrisman
State Auditor
Legislative Audit Bureau
22 East Mifflin Street, Suite 500
Madison WI 53703

Subject: WPDES Permit Program Audit

Dear Mr. Chrisman:

Thank you for a comprehensive and insightful analysis of our municipal, industrial and agricultural wastewater permitting programs. We agree with your comments and recommendations and find them to be helpful and constructive. They will assist the department in our efforts to identify efficiencies, augment compliance and enhance water quality by issuing and managing practical and effective water discharge permits. We have recognized many of the issues you have identified, and have already, or are in the process of, establishing systems to address them. We very much appreciate the professionalism and collaborative approach taken by you and your staff through the audit process. Please accept our enclosed clarifying comments in the same collaborative framework as we work together to improve our processes to protect and improve water quality in Wisconsin.

Expenditures and Staffing

We agree with the number of hours associated with the Concentrated Animal Feeding operations (CAFO) program but would like to point out that the number of hours currently being attributed to program implementation exceeds the number of staff actually allocated to the program. As we looked through expenditures associated with the staffing investment, the increase is approximately 1.1% per year. To provide a little context, the CAFO program includes Central Office staff and Regional staff positions. There are currently 10.5 regional positions that handle permitting and compliance activity; 6.0 central office positions that assist with review and approval of construction plans, and nutrient management plans; and 0.5 position that helps with compliance and enforcement. There are supporting staff such as the managers, IT assistance, permit application intake LTEs, and legal and enforcement staff in other programs that are critical to full implementation.

Four of the six recommendations included in the LAB report for CAFOs involve the work conducted by the 10.5 regional staff, including annual report review, facility inspections, manure hauling audits and compliance activities. In order to accomplish this work, the department has calculated that a CAFO permit to staff ratio of 20 is a level where all the required work can be accomplished. With the

current number of permits issued and new applications in house, the permit to regional staff ratio is now 31.

Permitting Process

Recommendation

We recommend the Department of Natural Resources report to the Joint Legislative Audit Committee by November 1, 2016, on the status of its efforts to make CAFO application forms, design plans, and nutrient management plans easily accessible through its website.

CAFO Application Process: In regards to the recommendation to make CAFO application materials available through a website, the department agrees and has already begun the necessary development steps to achieve this goal. The plans and specifications and substantial modifications to nutrient management plan components of the CAFO application process are already available electronically through the web. Our goal is to continue to expand the balance of the application process materials through the same web site by the end of 2016, depending on available resources.

Permit Backlog

Recommendation

We recommend the Department of Natural Resources:

- *develop and implement a plan to further reduce the WPDES permit backlog; and*
- *report to the Joint Legislative Audit Committee by November 1, 2016, on its effort, including the status of any permits backlogged for more than one year.*

Permit Backlog: While the Department acknowledges the current permit backlog for municipal and industrial permits exceeds the 10% backlog rate considered to be the national goal set by EPA, it is important to understand the reasons for the backlog. The backlog increased due to a number of factors. In 2010, administrative rule changes required the department to incorporate new regulations into all WPDES permits and also, during 2010-2011, the Bureau of Water Quality experienced the largest vacancy rate ever in the history of the program. Retirements that year represented nearly 30% of the full-time staff in the Bureau. As part of its plan to decrease the backlog, the Department has worked to fill vacancies to replace staff; however, the complexity of the program is such that newly hired staff require several years to become proficient permit drafters. The Department has already developed a strategy to address the backlog including conducting a Lean Six Sigma project for the permit program. This Lean project identified 84 recommendations to improve the permit processing timeline and allow the Department to reach the backlog goal. Most of these recommendations have been implemented and the backlog for municipal and industrial permits has been reduced from 35.4% in April 2012, to 24 % as of April, 2016. The Department continues to focus on filling staff vacancies to continue to reduce the backlog and we expect to make substantial progress toward reducing the backlog over the next year.

Municipal and Industrial Inspections

Recommendation

We recommend the Department of Natural Resources:

- *regularly assess its performance in conducting inspections of municipal and industrial permittees based on its established goals;*
- *develop and implement a plan to improve its performance in meeting its inspection goals for municipal and industrial permittees; and*
- *report to the Joint Legislative Audit Committee by November 1, 2016, on its progress in developing and implementing the plan.*

CAFO Inspections

Recommendation

We recommend the Department of Natural Resources:

- *regularly assess its performance in conducting inspections of CAFO permittees based on its established goals;*
- *develop and implement a plan to improve its performance in meeting its inspection goals for CAFO permittees; and*
- *report to the Joint Legislative Audit Committee by November 1, 2016, on its progress in developing and implementing the plan.*

Inspections: The permitting program does assess its performance in inspecting facilities for municipal, industrial and CAFO facilities with respect to the inspection goals set by EPA. The goals we use are not the goals represented by the guidance document referenced in the report. (Note: This guidance will be revised to reflect the actual practice of following EPA national goals as discussed below.) The WDNR annually commits to inspection goals by submitting a Compliance Monitoring Strategy (CMS) report reflecting the national goals set by the EPA. The Department submits both mid-year CMS inspection numbers and end-of-year CMS inspections numbers annually to the EPA. The goals established in the CMS for municipal, industrial and CAFO facility inspections are one inspection for all majors every two years and one inspection for minors and CAFOs every 5 years. Additionally, the CMS describes national goals and requirements for pre-treatment program audits and inspections, biosolids inspections, CSO inspections, and industrial and MS4 storm water inspections.

All of these metrics are evaluated and reported semi-annually to the Region 5 EPA. The goals set forth for municipal and industrial inspection numbers in the CMS and for CAFOs are consistently met. It should also be noted that the number of inspections for CAFOs has more than doubled over the audit period. Finally we appreciate the audit report finding that pointed out that the department performs more frequent inspections of CAFOs with previous violations – an example of how staff time is prioritized to focus our inspection efforts.

Records and Annual Reports

Recommendation

We recommend the Department of Natural Resources require its staff to:

- *record in the WPDES database the dates that annual reports submitted by CAFO permittees were received; and*
- *thoroughly review the annual reports submitted by CAFO permittees.*

Records: Several recommendations referred to electronic recording of records – specifically CAFO annual reports, records of inspections, determinations of substantial compliance and notices of noncompliance. The department agrees that improved record keeping in these areas is necessary, and will be developing efficient systems and training to accomplish this as resources allow. However, we would like to note that we believe these activities are currently being completed, but that documentation of department actions should be improved.

Review of CAFO Annual Reports: The department agrees that annual reports from CAFOs can be used more effectively as a tool to determine permit compliance, and will develop a process to increase effectiveness and efficiency in its review of these documents as resources allow.

Determining Substantial Compliance

Recommendation

We recommend the Department of Natural Resources develop a plan to:

- *ensure that records of all inspections and determinations of substantial compliance are entered into the WPDES database;*
- *ensure that all WPDES permittees are inspected within 12 months before expiration of their current permits;*
- *ensure that WPDES permittees are determined to be in substantial compliance with the terms of their permits before DNR reissues the permits, as required by statutes; and*
- *report to the Joint Legislative Audit Committee on the status of these efforts by November 1, 2016.*

Substantial Compliance: The Department looks at site and situation specific factors when deciding whether or not substantial compliance has been met and whether a permit should be reissued. Where warranted, permit reissuances are held in abeyance pending permittee action to address noncompliance issues. This is reflected in the Department's quarterly permit backlog tracking reports, with permittees not in substantial compliance with their permit. For example, this accounts for only 1-2% of backlogged CAFO permits. However, a lack of a written substantial compliance determination does not mean that such a determination was not made. The Department acknowledges that there have been historical issues with formally documenting inspections and determinations of substantial compliance. In more recent years, the Department has taken steps to improve documentation of these events, including the development of standard operating procedures, and a greater focus on training to educate and assist staff on compliance related issues.

Enforcement Efforts

Recommendation

We recommend the Department of Natural Resources:

- *regularly assess its performance in issuing notices of violation for municipal and industrial permittees based on its established policies;*
- *develop a strategy to increase the consistency between its enforcement policies and its actual practice of issuing notices of violation for municipal and industrial permittees;*
- *report to the Joint Legislative Audit Committee by November 1, 2016, on its efforts.*

NONs and NOVs: The Department agrees that consistency in the documentation processes for enforcement actions could be improved by utilizing a central database. The Water Quality Bureau is addressing these inconsistencies in documentation and feels that the report would have more accurately reflected the enforcement activities if all Notices of Noncompliance (NON) and less formal enforcement actions were recorded and stored in a single dataset.

The report references and draws conclusions on the expected number of Notices of Violation (NOV) based on internal program guidance. This document provides factors for our staff to consider when determining the initial response to noncompliance. The Department most often starts with the most appropriate enforcement approach (informal discussion or NON) and only escalates to a more aggressive approach (NOV, enforcement conference, referral) if a more collaborative approach does not result in compliance. While the audit report acknowledged that there were at least 838 NONs issued during the audit period, it was not able to provide a full description or assessment of the results of our enforcement actions given the lack of a centralized database to provide the necessary documentation. Compliance staff are granted broad enforcement discretion to use their professional judgment, and most often begin addressing an issue through informal conversations or working with facilities through NONs to achieve compliance. The lower than expected number of NOVs is indicative of the fact that our less formal approaches result in attaining compliance in most of the cases, so the issue was addressed without the use of an NOV. It is important to emphasize that the audit findings do not mean the situations evaluated were not addressed.

We also wish to acknowledge the data shown on table 13, which indicates the increase in CAFO enforcement actions over the audit period.

Additionally, it was not captured within the scope of the audit but the Department has spent substantial time in the recent past pursuing enforcement against septage companies. For example, in 2014, more aggressive enforcement activities such as NOVs, enforcement conferences and DOJ referrals were pursued against 25 separate septage companies. The focus on this enforcement activity was in response to citizen complaints and the increased potential negative health impacts of improperly disposing of untreated septic waste.

Regional Variation

Recommendation

We recommend the Department of Natural Resources:

- *determine the extent to which differences in the percentage of enforcement actions for CAFO permittees between the Northeast Region and its other regions can be explained by efforts to address the complaints that are received;*

- review a sample of enforcement actions taken for CAFO permittees statewide and, where needed, provide training to its staff to increase the consistency of its enforcement actions throughout the state; and
- report to the Joint Legislative Audit Committee by November 1, 2016, on its efforts

Regional Variation: The Department agrees with the audit findings regarding the need to increase consistency of implementation of programs around the state and has already begun to take steps to address this concern. In July of 2015, the department modified its reporting structure to a line organization in which all field staff and field supervisors around the state within a program now report to the program director within central office rather than regional supervisors. One of the main reasons for implementing this change was to further increase consistency in permitting, inspections, and enforcement around the state. This organizational change also increased the department's ability to allocate work among staff located around the state as well as reallocate resources as necessary.

Future Considerations

Recommendation

We recommend the Department of Natural Resources report to the Joint Legislative Audit Committee by November 1, 2016, on:

- the status of its request to EPA for the statewide multi-discharger variance for phosphorus limits;
- its progress in addressing the 38 issues identified in EPA's July 2011 letter that were not addressed as of April 2016; and
- any actions EPA has taken as a result of the citizen petition.

Multi Discharger Variance: The department submitted the request for a multi-discharger variance to EPA on March 31, 2016. EPA has not yet responded to the request, but during recent inquiries to EPA, they indicated that the delay is due to the complexity of the issue.

Issues Identified by EPA: On July 18, 2011, DNR received a letter from EPA identifying 75 issues and potential inconsistencies with Wisconsin's authority to administer the WPDES permit program. DNR has worked to address most issues through rule changes, dividing related issues into eight separate rule packages. DNR has adopted six of eight regulatory packages that account for many issues identified by EPA.

Specifically, the Department has completely resolved 38 issues through rule making or other methods. An additional 21 issues addressed through rule changes were adopted by the Natural Resources Board in January 2016. These two rule packages are currently at the legislature awaiting approval. Administrative rule changes addressing 10 additional items are drafted and going out for solicitation of economic impact information. The solutions to address the remaining 6 issues out of the 75 are either being developed or will require legislative action.

Of the eleven issues affecting the storm water program, three have been resolved through statutory changes, six have been addressed by changes to a reporting form or the permit and one was identified by EPA as no longer being an issue. The final issue will be addressed by an administrative rule revision scheduled to begin in later in 2016.

Addressing Groundwater Contamination in Kewaunee County

Recommendation

We recommend the Department of Natural Resources report to the Joint Legislative Audit Committee by November 1, 2016, on:

- the status of its efforts to address groundwater contamination in Kewaunee County and on any additional information that has become available concerning the likely source or sources of the contamination; and
- the extent to which it plans to implement the recommendations made by each of the five workgroups.

Kewaunee County: Thank you for a thorough discussion of our efforts in regard to groundwater concerns in Kewaunee County. These same concerns exist in other areas of the state with similar geology – shallow soils overlaying fractured bedrock.

Three of the five workgroups have now completed their work. The Communications Work Group is now compiling a final report of the recommendations which is expected by the end of the week of June 6. However, the department has already begun work on several of the recommendations as follows:

- Increase audits of nutrient management plan implementation – Department staff began to address this recommendation as early as last fall, and also this spring, when field audits of manure spreading were increased. The department has also reallocated resources to be able to fill all vacancies in the CAFO program. The goal is to work with the Kewaunee County CAFOs on the findings of the audits.
- Although the recommendation was to fill an environmental warden position in Kewaunee County, the department is in the process of hiring an environmental enforcement specialist, which we have determined to be a more effective position to address the groundwater concerns.
- A number of recommendations focused on the need to identify sensitive area conditions and to implement additional best management practices in those areas, such as restricting or reducing manure spreading rates and providing setbacks for conduits to groundwater. The department has met with agricultural producers to inform and recommend voluntary implementation and has already begun the scope statement process to revise administrative codes to formally adopt these additional practices as performance standards and into appropriate regulations.
- Several recommendations involved internal processes such as how the department investigates well contamination events, addresses permit violations and communicates with counties and the public regarding these occurrences. The department has established several teams of staff to address these ideas and anticipates further internal guidance development to improve its processes. The department has already established a unique web page to provide information to the public on these issues.

The fifth work group, Alternative Practices, is being formed, with a first meeting scheduled in late June. This work group will continue to review new or alternative technology and best management practices, serve as a continued communication forum and provide additional suggestions into the future. In addition, the Communications Work Group will continue to meet as necessary to provide input not only on what, how and