

# Wastewater Permitting and Enforcement

Department of Natural Resources

June 2016

## Report Highlights ■

***Expenditures for the WPDES program increased from \$9.3 million in FY 2005-06 to \$10.4 million in FY 2014-15.***

***We found that permits for 41 permittees (2.9 percent) had been backlogged for six or more years.***

***DNR inspected 17 CAFO permittees (6.5 percent) after their permits had already been reissued.***

***Enforcement actions taken by DNR for municipal and industrial permittees showed a general decline from 2005 through 2014.***

***We found that DNR issued a notice of violation for only 33 of the 558 instances (5.9 percent) for which such a notice should have been issued based on its policies.***

The Department of Natural Resources (DNR) administers the Wisconsin Pollutant Discharge Elimination System (WPDES) program, which regulates the discharge of pollutants to surface water and groundwater. As part of its responsibility, DNR is required to ensure that approximately 1,250 municipal wastewater treatment plants, industrial wastewater treatment facilities, and large livestock farms known as concentrated animal feeding operations (CAFOs), are complying with the terms of their permits. WPDES permits, which are issued for five-year periods, typically place limits on the type and concentration of pollutants that may be discharged, place ongoing monitoring and reporting requirements on permittees, and establish requirements for practices such as waste collection systems and land application procedures for manure.

At the request of the Joint Legislative Audit Committee, we reviewed:

- trends in the number of permittees, revenues, expenditures, and DNR staffing for permitting and oversight activities;
- DNR's timeliness in issuing permits;
- DNR's compliance with statutory and administrative rule requirements;
- the compliance of regulated entities with permit requirements;
- DNR's monitoring and oversight activities; and
- the consistency and appropriateness of DNR's enforcement actions.

## Expenditures

Expenditures for the WPDES program increased from \$9.3 million in fiscal year (FY) 2005-06 to \$10.4 million in FY 2014-15, or by 11.7 percent. In both years, salaries and fringe benefits comprised over 90 percent of total program expenditures. Expenditures for the WPDES program are funded by a combination of state, federal, and program revenue.

## Permitting Process

Staff of the Environmental Protection Agency (EPA) indicated that the size of a permit backlog is one indicator of how well a state’s wastewater program is administered. Permits that are not reissued before they expire are administratively extended and become part of a backlog. DNR has established a goal to limit its WPDES permit backlog to no more than 10 percent for both municipal and industrial permits and to no more than 15 percent for CAFO permits.

From 2005 through 2015, DNR met its goal of having no more than a 10 percent backlog for municipal permits for 4 of these 11 years, but never met this goal for industrial permits. In addition, DNR met its goal of having no more than a 15 percent backlog for CAFO permits for 9 of the 11 years we reviewed.

### Permit Backlog<sup>1</sup>

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 <sup>2</sup>
Municipal Permits	6.0%	4.7%	6.8%	10.0%	14.1%	19.0%	26.1%	30.1%	29.8%	27.6%	22.5%
Industrial Permits	13.9%	13.2%	16.3%	19.4%	21.6%	27.4%	37.1%	43.9%	36.0%	27.0%	27.7%
CAFO Permits	13.6%	13.2%	10.4%	13.6%	11.9%	13.5%	13.7%	15.1%	15.4%	9.9%	9.9%

Shaded cells indicate DNR did not meet its backlog goal: no more than 10 percent for municipal and industrial permits and no more than 15 percent for CAFO permits.

<sup>1</sup>Based on July of each year.

<sup>2</sup>Based on unaudited data reported by DNR.

## Monitoring and Oversight

It is DNR’s goal to inspect major municipal and industrial permittees at least once every two years, inspect minor municipal and industrial permittees at least twice during each five-year permit term, and inspect CAFO permittees at least twice during each five-year permit term.

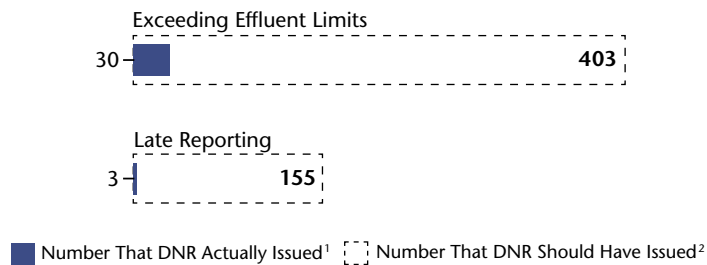
The extent to which DNR met its goal for inspecting major municipal permittees declined from a high of 92 percent during the two-year period from 2005 through 2006 to a low of 45 percent during the two-year period from 2010 through 2011. The percentage of major industrial permittees inspected at least once within each two-year period declined from a high of 95 percent during the two-year period from 2005 through 2006 to a low of 21 percent during the two-year period from 2010 through 2011. Inspections for both types generally increased thereafter.

We found that although the extent to which DNR met its goal for CAFO inspections increased from 2005 through 2014, the percentage never exceeded 48 percent during this period. We also found significant differences in the extent to which DNR achieved its inspection goals for municipal, industrial, and CAFO permittees among its five regions.

## Enforcement Efforts

We assessed DNR’s compliance with its policies for determining when notices of violation “should be issued” in response to violations of the amount of pollutants discharged in treated wastewater, which is known as effluent, and for late reporting by municipal and industrial permittees. We found that DNR issued notices of violation for only 33 of the 558 instances (5.9 percent) for which a notice of violation should have been issued from 2005 through 2014. Moreover, of the 33 notices of violation that DNR issued, 17 (51.5 percent) did not address all of the effluent and reporting violations for which a notice of violation should have been issued. The extent to which notices of violation were issued in accordance with its policies among DNR’s five regions also varied.

### Selected Notices of Violation for Municipal and Industrial Permittees 2005 through 2014



<sup>1</sup> Includes 16 notices of violation that addressed all of the violations for which a notice should have been issued and 17 notices that addressed only some of the violations for which a notice should have been issued.

<sup>2</sup> Based on the criteria established in DNR’s policies.

We also found the percentage of CAFO permittees for which DNR took at least one enforcement action from 2005 through 2014 ranged from 17.6 percent in the Northern Region to 56.8 percent in the Northeast Region. The Northeast Region was an outlier and 19 of the 20 CAFO permittees for which DNR took five or more enforcement actions were located in this region.

## Future Considerations

Several ongoing issues may affect the future administration and cost to permittees of the WPDES program. First, in response to an EPA request and pressure from several environmental organizations, DNR established a new process for calculating phosphorus limits. In October 2015, the Department of Administration (DOA) directed DNR to request a statewide multi-discharger variance from EPA because

### Key Facts and Findings

*Turnover has been an issue especially for DNR staff responsible for CAFO permitting and oversight.*

*Only 36 of approximately 1,900 reports required to be submitted by CAFO permittees had been electronically recorded as being received.*

*Before DNR reissues a WPDES permit, it is required by statute to determine that the permittee is in*

*substantial compliance. However from 2006 through 2014, DNR did not do so for 17 CAFO permittees.*

*Adequate, consistent, and timely enforcement action is important to ensuring the integrity of the WPDES program.*

*In July 2011, EPA identified 75 concerns with the statutes and rules governing the WPDES program.*

DOA estimated the cost to comply with the phosphorus limits, as promulgated, would total at least \$3.4 billion in capital investments, with additional debt service and operating costs of up to \$700 million per year.

Second, after conducting a legal review of the WPDES program, EPA's Region 5 administrator issued a letter to DNR in July 2011 that identified 75 issues with the statutes and rules governing the program that EPA indicated needed to be addressed. Of the 64 issues affecting the municipal, industrial, and CAFO permittees included in our review, we found 33 (51.6 percent) were addressed as of April 2016, and an additional 31 (48.4 percent) were in the process of being addressed.

Third, testing of wells in Kewaunee County has found unsafe levels of nitrates and bacteria, including a DNR-funded study that in November 2015 found that 34.4 percent of tested wells were contaminated. DNR formed five workgroups to study the issue, and it expects to receive the recommendations in June 2016.

## Recommendations

We include recommendations for DNR to require its staff to electronically record the dates that annual reports submitted by CAFO permittees are received and to thoroughly review these reports ([p. 44](#)).

We further recommend DNR report to the Joint Legislative Audit Committee by November 1, 2016, on the status of its efforts to:

- ☑ make CAFO application materials easily accessible through its website ([p. 32](#));
- ☑ develop and implement a plan to further reduce the WPDES permit backlog ([p. 37](#));
- ☑ regularly assess its performance in conducting inspections and improve its performance in meeting inspection goals ([pp. 48](#) and [50](#));
- ☑ ensure that records of all inspections and determinations of substantial compliance are electronically recorded, that permittees are inspected within 12 months of expiration of their current permits, and that permittees are determined to be in substantial compliance with the terms of their permits before reissuance, as required by statutes ([p. 57](#));
- ☑ regularly assess its performance in issuing notices of violation and develop a strategy to increase the consistency between its enforcement policies and its actual practice of issuing notices of violation ([p. 73](#));
- ☑ assess the regional variation in enforcement actions for CAFO permittees and provide training where needed ([p. 75](#));
- ☑ request a statewide multi-discharger variance for phosphorus limits from EPA, as directed by DOA ([p. 81](#));
- ☑ address the issues identified in EPA's July 2011 letter that had not been addressed as of April 2016 ([p. 81](#)); and
- ☑ address groundwater contamination issues in Kewaunee County and the recommendations of its workgroups ([p. 83](#)).



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