

North Carolina Department of Environmental Quality

Pat McCrory
Governor

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Secretary

November 18, 2015

MEMORANDUM

TO: ENVIRONMENTAL REVIEW COMMISSION
The Honorable Mike Hager, Co-Chair
The Honorable Brent Jackson, Co-Chair

FISCAL RESEARCH DIVISION

FROM: Matthew Dockham, Director of Legislative Affairs

SUBJECT: 2015 Animal Waste Management Annual Report

DATE: November 18, 2015

Pursuant to G.S. 143-215.10M, the Department of Environmental Quality shall submit to the Environmental Review Commission and the Fiscal Research Division a report on the permitting, inspection, and compliance activity of animal waste operations across the state by October 1st of each year. Please consider the 2015 Animal Waste Management Report attached as the formal submission of this report.

If you have any questions or need additional information, please contact me by phone at (919) 707-8618 or via e-mail at matthew.dockham@ncdenr.gov.

cc: Tom Reeder, Assistant Secretary for Environment, NCDEQ
Jay Zimmerman, Director of Water Resources, NCDEQ

Department of Environmental Quality Annual Report on Animal Waste Operations Permitting, Inspection and Compliance Activities

July 1, 2014 through June 30, 2015

Per G.S. 143-215.10M, the Department of Environmental Quality reports annually to the Environmental Review Commission and Fiscal Research Division on the permitting, inspection, and compliance activity of animal waste operations across the state. Accounting for activities required under G.S. 143-215.10F and S.L. 1997-443 (and its subsequent amendments) is also included in this report.

General Statute 143-215.10F requires annual inspection of every permitted animal operation by the Division of Water Quality (DWQ) (Divisions of Water Quality and Water Resources have merged into one program called the N.C. Division of Water Resources (DWR), effective August 1, 2013). Under S.L. 1997-443, the Division of Soil and Water Conservation (DSWC) (effective July 1, 2011, DSWC is a division under the Department of Agriculture and Consumer Services) has been conducting a pilot project inspecting swine operations in Brunswick, Columbus, Jones and Pender counties. Effective July 1, 2011, House Bill 200 removed the requirement for DSWC to inspect each animal operation annually and removed funding for the operations reviews. As a result, DWR conducts all routine animal operation inspections, except for those facilities located in the above mentioned counties. DSWC continues to perform pilot program inspections under S.L. 1997-443, and provides technical assistance and operation review inspections upon request.

The tables below indicate the number of inspections performed by the DWR and the DSWC, the numbers of violations identified during inspections, enforcement actions initiated, and permits issued for July 1, 2014 through June 30, 2015.

Overall, the two divisions conducted 2,358 compliance inspections and operation reviews during the 2014-2015 fiscal year throughout the seven regional offices (Table 1). Regional office abbreviations are explained at the end of this document. Each facility received at least one compliance inspection by DWR, or by DSWC in pilot counties.

Table 1. Inspection activities of DWR and DSWC staff during the 2014-2015 fiscal year.

| INSPECTIONS | ARO | FRO | MRO | RRO | WARO | WIRO | WSRO | State Totals |
|--|-----------|------------|-----------|------------|------------|------------|------------|--------------|
| DWR Total number of inspections completed | 37 | 761 | 75 | 245 | 418 | 526 | 125 | 2187 |
| Routine DWR annual compliance inspections | 28 | 752 | 68 | 219 | 408 | 516 | 102 | 2093 |
| Inspections conducted due to complaints | 3 | 3 | 6 | 4 | 2 | 4 | 9 | 31 |
| Follow-up of previous review or inspection | 5 | 5 | 1 | 18 | 4 | 3 | 11 | 47 |
| Emergency Notification | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 4 |
| Lagoon Evaluations | 0 | 0 | 0 | 2 | 3 | 1 | 2 | 8 |
| Other inspections | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 4 |
| DSWC Total number of compliance inspections completed* | | | | | 54 | 116 | | 170 |
| Routine DSWC annual compliance inspections | | | | | 54 | 113 | | 167 |
| Inspections conducted due to complaints | | | | | 0 | 1 | | 1 |
| Follow-up of previous review or inspection | | | | | 0 | 0 | | 0 |
| Emergency Notification | | | | | 0 | 0 | | 0 |
| Response to DWR referral | | | | | 0 | 0 | | 0 |
| Other inspections | | | | | 0 | 2 | | 2 |
| DSWC Total number of operation reviews completed** | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Routine operation reviews | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Technical Assistance | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Follow-up of previous review or inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Emergency Notification | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other inspections | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 37 | 762 | 75 | 245 | 472 | 642 | 125 | 2358 |
| Total number of Animal Operations requiring Inspections and Operations Reviews during this year | 22 | 739 | 71 | 219 | 513 | 668 | 91 | 2323 |

*Pilot Project, S.L. 1997-443 and subsequent amendments.

** Total number of permitted facilities.

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Table 2 presents the total number of animal permits issued by DWR by regional office in fiscal year 2014-15. This number includes new projects and any modifications made to existing permits including renewals. Approximately 2,300 farms are covered under State General Permits, which are renewed on a five-year cycle. The renewal for these permits took place in 2014 and more than 2,200 State General permits were issued on October 1, 2014.

Table 2. Permits issued by DWR for animal operations in each Regional Office during July 1, 2014 through June 30, 2015.*.

| ANIMAL OPERATIONS PERMITS ISSUED | | ARO | FRO | MRO | RRO | WARO | WIRO | WSRO | State Totals |
|----------------------------------|--|-----------|------------|------------|------------|------------|------------|------------|--------------|
| Swine | | 1 | 725 | 4 | 192 | 537 | 732 | 22 | 2213 |
| Cattle | | 18 | 4 | 131 | 24 | 3 | 1 | 90 | 271 |
| Poultry | | 0 | 1 | 1 | 8 | 0 | 0 | 0 | 10 |
| Horses | | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Manure Hauler | | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 3 |
| Totals | | 19 | 730 | 136 | 225 | 541 | 734 | 113 | 2498 |

* Includes modifications, renewals, and new projects

Tables 3 and 5 provide a summary by regional office of numbers and types of deficiencies and violations found during DWR and DSWC inspections during the past fiscal year. Some of these violations were self-reported and were included in the table to provide a complete picture of the number of deficiency or violation letters issued.

Table 3. Deficiencies and violations found during DWR and DSWC inspections during the past fiscal year by each Regional Office.

| DEFICIENCIES AND VIOLATIONS IDENTIFIED | ARO | FRO | MRO | RRO | WARO | WIRO | WSRO | State Totals |
|---|-----|-----|-----|-----|------|------|------|--------------|
| Deficiencies and Violations found during DSWC operations reviews and DWR inspections* | 5 | 15 | 3 | 72 | 30 | 44 | 43 | 212 |
| Number of facilities receiving a deficiency or violation from inspections** | 5 | 10 | 8 | 3 | 11 | 14 | 6 | 57 |
| Enforcement actions initiated for violations noted during this year*** | 0 | 1 | 1 | 2 | 4 | 2 | 1 | 11 |

*Violation totals include violations noted during both operation reviews and compliance inspections and may include multiple violations at a single facility.

**Some violation letters were sent due to violations that were self-reported, and not discovered during an inspection.

***Some enforcement actions being developed by the regional staff are normally not shown as actions initiated during that year. These actions will be included in the next annual report.

Out of the 2,358 inspections, approximately nine percent of the inspections identified violations (Table 4). Note that each inspection reviews seven major items and with 2,358 inspections, there is the potential for a total of 16,506 major violations. There were 212 violations identified (less than one percent of the universe of potential violations). Inadequate freeboard, unpermitted discharges from the systems, evidence of over application and use of crops not identified in the permit were the most common violations and deficiencies (Tables 4 – 6). Cattle and Swine facilities had the highest number of violations and deficiencies among the types of animal operations (Table 6).

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Table 4. A breakdown of specific violations discovered during DWR and DSWC inspections during the past fiscal year.

| DEFICIENCIES AND VIOLATIONS IDENTIFIED | Total number of inspections with identified problem | Percent of total problems identified | Percent of total inspections completed (2358) |
|---|---|--------------------------------------|---|
| Discharges from Animal Waste Management System | 26 | 12.3% | 1.1% |
| Of the total discharges identified, the number of discharges that reached surface waters of the state | (21) | (9.9%) | (0.9%) |
| Inadequate Freeboard (Permitted Farms) | 104 | 49.1% | 4.4% |
| Of the total inspections identified with inadequate freeboard, the number of inspections with freeboard noted at less than 1 foot | (50) | (23.6%) | (2.1%) |
| No Certified Operator in Charge | 0 | 0.0% | 0.0% |
| Evidence of over application | 43 | 20.3% | 1.8% |
| Does not meet setbacks | 8 | 3.8% | 0.3% |
| Inadequate land | 4 | 1.9% | 0.2% |
| Crop differs from that stated in Certified Animal Waste Management Plan | 27 | 12.7% | 1.1% |
| Totals* | 212 | 100.0% | 9.0% |

Table 5. Deficiencies and violations discovered during DWR and DSWC inspections by Regional Office over the past fiscal year.

| DEFICIENCIES AND VIOLATIONS IDENTIFIED | ARO | FRO | MRO | RRO | WARO | WIRO | WSRO | State Totals |
|---|----------|-----------|----------|-----------|-----------|-----------|-----------|--------------|
| Discharges from Animal Waste Management System | 2 | 3 | 3 | 11 | 1 | 3 | 3 | 26 |
| Of the total discharges identified, the number of discharges that reached surface waters of the state | (2) | (2) | (3) | (10) | (1) | (2) | (1) | (21) |
| Inadequate Freeboard (Permitted Farms) | 1 | 2 | 0 | 54 | 14 | 25 | 8 | 104 |
| Of the total inspections identified with inadequate freeboard, the number of inspections with freeboard noted at less than 1 foot | (0) | (0) | (0) | (43) | (2) | (4) | (1) | (50) |
| No Certified Operator in Charge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Evidence of over application | 1 | 5 | 0 | 5 | 14 | 8 | 10 | 43 |
| Does not meet setbacks | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 8 |
| Inadequate land | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 4 |
| Crop differs from that stated in Certified Animal Waste Management Plan | 1 | 4 | 0 | 2 | 1 | 5 | 14 | 27 |
| Totals | 5 | 15 | 3 | 72 | 30 | 44 | 43 | 212 |

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Table 6. Deficiencies and violations found during inspection by DWR and DSWC at each type of animal operation over the past fiscal year.

| DEFICIENCIES AND VIOLATIONS IDENTIFIED | Swine | Cattle | Poultry | Horses | State Totals |
|---|-------------|------------|-----------|----------|--------------|
| Discharges from Animal Waste Management System | 10 | 16 | 0 | 0 | 26 |
| Of the total discharges identified, the number of discharges that reached surface waters of the state | (7) | (14) | (0) | (0) | (21) |
| Inadequate Freeboard (Permitted Farms) | 47 | 56 | 1 | 0 | 104 |
| Of the total inspections identified with inadequate freeboard, the number of inspections with freeboard noted at less than 1 foot | (8) | (41) | (1) | (0) | (50) |
| No Certified Operator in Charge | 0 | 0 | 0 | 0 | 0 |
| Evidence of over application | 31 | 12 | 0 | 0 | 43 |
| Does not meet setbacks | 2 | 6 | 0 | 0 | 8 |
| Inadequate land | 2 | 2 | 0 | 0 | 4 |
| Crop differs from that stated in Certified Animal Waste Management Plan | 15 | 12 | 0 | 0 | 27 |
| Totals | 107 | 104 | 1 | 0 | 212 |
| Total Number of Animal Operations | 2109 | 186 | 20 | 4 | 2323 |

Regional Office Abbreviations:

- ARO – Asheville Regional Office
- FRO – Fayetteville Regional Office
- MRO – Mooresville Regional Office
- RRO – Raleigh Regional Office
- WARO – Washington Regional Office
- WIRO – Wilmington Regional Office
- WSRO – Winston-Salem Regional Office