

### North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue Governor Dee Freeman Secretary

October 1, 2012

#### **MEMORANDUM**

TO: ENVIRONMENTAL REVIEW COMMISSION

The Honorable David Rouzer, Chair The Honorable Mitch Gillespie, Co-Chair The Honorable Ruth Samuelson, Co-Chair

FISCAL RESEARCH

Mr. Mark Trogdon, Acting Director, Fiscal Research Division

FROM: Kari Barsness

Director of Legislative and Intergovernmental Affairs

SUBJECT: 2012 Animal Waste Management Annual Report

DATE: October 1, 2012

Pursuant to G.S. 143-215.10M, the Department of Environment and Natural Resources 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 1<sup>st</sup> of each year. Please consider the 2012 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 <a href="mailto:Kari.Barsness@ncdenr.gov">Kari.Barsness@ncdenr.gov</a>.

cc: Robin Smith, Assistant Secretary for Environment, NCDENR Chuck Wakild, Director, DWQ, NCDENR Kristin Walker, Fiscal Research Division Mariah Matheson, Research Division, NC General Assembly Lanier McRee, Fiscal Research Division, NC General Assembly



### July 1, 2011, through June 30, 2012

Per North Carolina G.S. 143-215.10M, the Department of Environment and Natural Resources 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). 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, HB 200 removed the requirement for DSWC to inspect each animal operation annually and removed funding for the operations reviews. As a result, DWQ conducts routine animal operation inspections. 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 DWQ and the DSWC, the numbers of violations identified during inspections, enforcement actions initiated and permits issued for July 1, 2011, through June 30, 2012.

Overall, the two divisions conducted 2,585 compliance inspections and operation reviews during the 2011-2012 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 DWQ, or by DSWC in pilot counties.

Table 1. Inspection Activities of DWQ And DSWC Staff by Regional Office During the 2011-2012 Fiscal Year.

	INSPECTIONS	ARO	FRO	MRO	RRO	WARO	WIRO	WSRO	State Totals
	DWQ Total number of inspections completed	25	822	83	229	543	506	87	2,295
	Routine DWQ annual compliance inspections	20	805	78	210	534	494	69	2,210
	Inspections conducted due to complaints	1	3	4	2	4	2	10	26
	Follow-up of previous review or inspection	4	12	1	11	4	8	6	46
	Emergency Notification	0	0	0	0	0	0	2	2
	Lagoon Evaluations	0	1	0	6	0	0	0	7
	Other inspections	0	1	0	0	1	2	0	4
co	DSWC Total number of compliance inspections completed – Brunswick, Columbus, Jones and Pender Counties only*					102	162		264
	Routine DSWC annual compliance inspections					57	160		217
	Inspections conducted due to complaints					1	1		2
	Follow-up of previous review or inspection					3	0		3
	Emergency Notification					39	0		39
	Response to DWQ referral					0	1		1
	Other inspections					2	0		2
0	SWC Total number of operation reviews completed	0	0	0	1	8	17	0	26
	Routine operation reviews	0	0	0	0	0	0	0	0
	Technical Assistance	0	0	0	0	0	17	0	17
	Follow-up of previous review or inspection	0	0	0	0	4	0	0	4
	Emergency Notification	0	0	0	0	0	0	0	0
	Other inspections	0	0	0	1	4	0	0	5
	Totals		822	83	230	653	685	87	2,585
Total	number of Animal Operations requiring Inspections and Operations Reviews during this year**	24	747	79	225	522	673	92	2,362

<sup>\*</sup>Pilot Project, S.L. 1997-443 and subsequent amendments.

<sup>\*\*</sup> Total number of permitted facilities.

July 1, 2011, through June 30, 2012

Table 2 presents the total number of permits issued by DWQ per regional office in FY 2011-12. This number includes new projects, as well as any modifications made to existing permits, including renewals. Approximately 2,300 farms are covered under General Permits, which are renewed on a five-year cycle. The next renewal for these permits will take place in 2014.

Table 2. Permits Issued by DWQ for Animal Operations in Each Regional Office During July 1, 2011, Through June 30, 2012.\*

ANIMAL OPERATIONS PERMITS ISSUED	ARO	FRO	MRO	RRO	WARO	WIRO	WSRO	State Totals
Swine	0	40	0	13	29	31	1	114
Cattle	0	0	5	5	0	0	5	15
Poultry	0	0	0	1	0	0	0	1
Horses	0	0	0	0	0	0	0	0
Totals		40	5	19	29	31	6	130

<sup>\*</sup> 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 DWQ and DSWC inspections over the past fiscal year. Washington, Wilmington and Fayetteville Regional Office areas, which have the highest number of permitted facilities, had the highest number of deficiencies and violations. 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 DWQ and DSWC Inspections During the Past Fiscal Year by Regional Office.

DEFICIENCIES AND VIOLATIONS IDENTIFIED	ARO	FRO	MRO	RRO	WARO	WIRO	WSRO	State Totals
Deficiencies and Violations found during DSWC operations reviews and DWQ inspections*	2	37	25	5	19	25	35	148
Number of facilities receiving a deficiency or violation letter **	5	22	16	8	19	6	10	86
Enforcement actions initiated for violations noted during this year***	0	3	1	0	1	0	2	7

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

Out of the 2,585 inspections, approximately 6 percent of the inspections identified violations (Table 4). Note that each inspection reviews seven major items; with 2,585 inspections, the potential exists for a total of 18,095 major violations. There were 148 violations identified (less than 1 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). Swine facilities had the highest number of violations and deficiencies among the types of animal operations. This is to be expected, as many more permitted swine facilities exist than cattle or poultry facilities (Table 6).

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

<sup>\*\*\*</sup>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.

July 1, 2011, through June 30, 2012

Table 4. Deficiencies and Violations Discovered During DWQ 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 (4844)	
Unpermitted discharges from Animal Waste Management System	31	20.9%	1.2%	
Of the total discharges identified, the number of discharges that reached surface waters of the state (subset of Unpermitted discharges count)	19	12.8%	0.7%	
Inadequate Freeboard (Permitted Farms)	33	22.3%	1.3%	
Of the total inspections identified with inadequate freeboard, the number of inspections with freeboard noted at less than 1 foot (subset of Inadequate Freeboard count)	4	2.7%	0.2%	
No Certified Operator in Charge	0	0.0%	0.0%	
Evidence of over-application	38	25.7%	1.5%	
Does not meet setbacks	8	5.4%	0.3%	
Inadequate land	2	1.4%	0.1%	
Crop differs from that stated in Certified Animal Waste Management Plan	36	24.3%	1.4%	
Totals	148		5.7%	

Table 5. Deficiencies and Violations Discovered During DWQ and DSWC Inspections by Regional Office Over the Past Fiscal Year.

DEFICIENCIES AND VIOLATIONS IDENTIFIED	ARO	FRO	MRO	RRO	WARO	WIRO	WSRO	State Totals
Unpermitted discharges from Animal Waste Management System	1	6	6	0	4	2	12	31
Of the total discharges identified, the number of discharges that reached surface waters of the state (subset of Unpermitted discharges)	1	3	6	0	2	0	7	19
Inadequate Freeboard (Permitted Farms)	0	2	2	3	10	9	7	33
Of the total inspections identified with inadequate freeboard, the number of inspections with freeboard noted at less than 1 foot (subset of Inadequate Freeboard)	0	2	0	2	0	0	0	4
No Certified Operator in Charge	0	0	0	0	0	0	0	0
Evidence of over-application	0	18	5	1	5	6	3	38
Does not meet setbacks	0	4	1	0	0	0	3	8
Inadequate land	0	2	0	0	0	0	0	2
Crop differs from that stated in Certified Animal Waste Management Plan	1	5	11	1	0	8	10	36
Totals	2	37	25	5	19	25	35	148

### July 1, 2011, through June 30, 2012

Table 6. Deficiencies and Violations Found During Inspection by DWQ and DSWC at Each Type of Animal Operation Over the Past Fiscal Year.

DEFICIENCIES AND VIOLATIONS IDENTIFIED	Swine	Cattle	Poultry	Horses	State Totals
Unpermitted discharges from Animal Waste Management System	15	16	0	0	31
Of the total discharges identified, the number of discharges that reached surface waters of the state (subset of Unpermitted Discharges)	8	11	0	0	19
Inadequate Freeboard (Permitted Farms)	22	8	3	0	33
Of the total inspections identified with inadequate freeboard, the number of inspections with freeboard noted at less than 1 foot (subset of Inadequate Freeboard)	2	0	2	0	4
No Certified Operator in Charge	0	0	0	0	0
Evidence of over-application	31	7	0	0	38
Does not meet setbacks	5	3	0	0	8
Inadequate land	2	0	0	0	2
Crop differs from that stated in Certified Animal Waste Management Plan	15	21	0	0	36
Number of Active Permits	2135	204	21	2	2362
Deficiency and Violation Totals	90	55	3	0	148

#### 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