



North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

September 28, 2011

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 *KKB*
Director of Legislative and Intergovernmental Affairs

SUBJECT: 2011 Animal Waste Management Annual Report

DATE: September 28, 2011

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 1st of each year. Please consider the 2011 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) 715-4189 or via e-mail at Kari.Barsness@ncdenr.gov.

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Department of Environment and Natural Resources

Annual Report on Animal Waste Operations Permitting, Inspection and Compliance Activities

July 1, 2010 through June 30, 2011

Per 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, 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 & 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 will conduct all the animal operation inspections for the coming years and there will be no annual operation reviews. DSWC will continue to perform pilot program inspections under S.L. 1997-443.

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, 2010 through June 30, 2011.

Overall, the two divisions conducted 4,844 compliance inspections and operation reviews during the 2010-2011 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 DSWC in pilot counties, and one operation review by DSWC. Routine operation reviews were normally conducted in the pilot counties in the spring and routine compliance inspections were conducted in the fall.

Table 1. Inspection Activities of DWQ And DSWC Staff by Regional Office During the 2010-2011 Fiscal Year.

INSPECTIONS		ARO	FRO	MRO	RRO	WARO	WIRO	WSRO	State Totals
DWQ	DWQ Total number of inspections completed	24	792	91	262	584	553	100	2406
	Routine DWQ annual compliance inspections	22	760	89	241	549	526	93	2280
	Inspections conducted due to complaints	2	3	1	3	4	5	4	22
	Follow-up of previous review or inspection	0	10	0	7	23	17	2	59
	Emergency Notification	0	0	1	0	5	2	0	8
	Lagoon Evaluations	0	17	0	11	3	0	1	32
	Other inspections	0	2	0	0	0	3	0	5
DSWC	DSWC Total number of compliance inspections completed – Brunswick, Columbus, Jones & Pender Counties only*					43	122		165
	Routine DSWC annual compliance inspections					39	115		154
	Inspections conducted due to complaints					0	1		1
	Follow-up of previous review or inspection					4	5		9
	Emergency Notification					0	0		0
	Response to DWQ referral					0	0		0
	Other inspections					0	1		1
DSWC	DSWC Total number of operation reviews completed**	20	702	59	225	509	689	69	2273
	Routine operation reviews	20	699	57	224	501	647	68	2216
	Technical Assistance	0	3	1	0	1	25	0	30
	Follow-up of previous review or inspection	0	0	1	1	4	13	0	19
	Emergency Notification	0	0	0	0	0	2	0	2
	Other inspections	0	0	0	0	3	2	1	6
Totals		44	1494	150	487	1093	1242	169	4844
Total number of Animal Operations requiring Inspections and Operations Reviews during this year***		24	750	84	225	523	675	93	2374

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

**DSWC numbers include site visits completed by Soil & Water Conservation District and NRCS staff.

*** Total number of permitted facilities.

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Table 2 presents the total number of permits issued by DWQ by regional office in FY 2010-11. 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, 2010 Through June 30, 2011.*

ANIMAL OPERATIONS PERMITS ISSUED		ARO	FRO	MRO	RRO	WARO	WIRO	WSRO	State Totals
	Swine	0	44	0	12	17	28	2	103
	Cattle	2	0	4	1	0	0	5	12
	Poultry	0	0	0	2	1	0	0	3
	Horses	0	0	0	0	0	0	0	0
Totals		2	44	4	15	18	28	7	118

* 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. Many of these violations were self-reported especially in the Fayetteville Region (FRO) 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*	9	44	29	20	79	72	17	270
Number of facilities receiving a deficiency or violation letter **	4	109	22	19	39	31	12	236
Enforcement actions initiated for violations noted during this year***	0	6	0	5	10	7	2	30

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

**Many of these violations 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 4,844 inspections, approximately 6% of the inspections identified violations (Table 4). Note that each inspection reviews seven major items and with 4,844 inspections, there is the potential for a total of 33,908 major violations. There were only 270 violations identified (less than 1% 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

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had the highest number of violations and deficiencies among the types of animal operations. This is to be expected as there are many more permitted swine facilities than cattle or poultry facilities (Table 6).

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	48	17.8%	1.0%
	<i>Of the total discharges identified, the number of discharges that reached surface waters of the state (subset of Unpermitted discharges count)</i>	26	9.6%	0.5%
	Inadequate Freeboard (Permitted Farms)	63	23.3%	1.3%
	<i>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)</i>	23	8.5%	0.5%
	No Certified Operator in Charge	26	9.6%	0.5%
	Evidence of over application	79	29.3%	1.6%
	Does not meet setbacks	6	2.2%	0.1%
	Inadequate land	2	0.7%	0.0%
	Crop differs from that stated in Certified Animal Waste Management Plan	46	17.0%	0.9%
Totals		270		5.6%

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	9	0	7	14	17	0	48
	<i>Of the total discharges identified, the number of discharges that reached surface waters of the state (subset of Unpermitted discharges)</i>	1	5	0	6	9	5	0	26
	Inadequate Freeboard (Permitted Farms)	2	9	5	1	29	14	3	63
	<i>Of the total inspections identified with inadequate freeboard, the number of inspections with freeboard noted at less than 1 foot (subset of Inadequate Freeboard)</i>	1	4	0	0	18	0	0	23
	No Certified Operator in Charge	1	3	9	0	5	8	0	26
	Evidence of over application	2	13	4	9	29	19	3	79
	Does not meet setbacks	0	2	0	0	0	1	3	6
	Inadequate land	0	1	0	1	0	0	0	2
	Crop differs from that stated in Certified Animal Waste Management Plan	3	7	11	2	2	13	8	46
Totals		9	44	29	20	79	72	17	270

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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		47	1	0	0	48
	<i>Of the total discharges identified, the number of discharges that reached surface waters of the state (subset of Unpermitted Discharges)</i>	25	1	0	0	26
Inadequate Freeboard (Permitted Farms)		53	9	1	0	63
	<i>Of the total inspections identified with inadequate freeboard, the number of inspections with freeboard noted at less than 1 foot (subset of Inadequate Freeboard)</i>	22	1	0	0	23
No Certified Operator in Charge		16	10	0	0	26
Evidence of over application		69	10	0	0	79
Does not meet setbacks		4	2	0	0	6
Inadequate land		2	0	0	0	2
Crop differs from that stated in Certified Animal Waste Management Plan		24	22	0	0	46
Number of Active Permits		2143	206	22	3	2374
Deficiency and Violation Totals		215	54	1	0	270

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