



**TO:** The Honorable Kerry Donovan, Chair  
Agriculture & Natural Resources Committee

The Honorable Dylan Roberts, Chair  
Rural Affairs & Agriculture Committee

**FROM:** Colorado Department of Public Health and Environment  
Environmental Agriculture Program

**DATE:** March 30, 2019

**SUBJECT:** Environmental Agriculture Program Annual Report

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### Reporting Requirement

Colorado Revised Statute, §25-8-502(1.7)(a), requires the Department of Public Health and Environment to report on or before March 31 of each year to a joint session of the senate and house agricultural committees on the water quality protection activities of the Environmental Agriculture Program ("Program"). The report must include information on the number of permits processed, the number of inspections conducted, the number of enforcement actions taken, and the costs associated with all program activities during the preceding year.

### Program Duties

The Program administers state and federal air and water quality requirements specific to animal feeding operations in Colorado. Included under the umbrella of animal feeding operations are large concentrated animal feeding operations ("CAFOs"), housed commercial swine feeding operations ("HCSFOs"), and smaller animal feeding operations, ("AFOs").

The Program assures compliance with:

- State-only odor and water quality discharge requirements specific to HCSFOs;
- Federally-delegated water quality requirements applicable to large CAFOs; and
- State-only best management practices for small AFOs.

In addition, the Program:

- Writes discharge and odor emissions permits;
- Conducts compliance inspections;
- Develops and implements regulations and policies, and provides technical assistance;
- Responds to complaints; and
- Assures compliance through enforcement actions as necessary.



A summary of the Program’s 2019 budget and 2018 performance metrics are provided below.

Budget		
<b>Funding</b>		
Revenues from fees	\$450,257 (water)	\$56,282 (air)
CAFO General Fund	\$99,538	
<b>Total Funding</b>	<b>\$606,077</b>	
<b>Expenses</b>		
Contracted Services <sup>1</sup>	\$77,268	
4.2 FTE, operating, indirect, etc.	\$482,915 (water)	\$59,634 (air)
<b>Total Expenses</b>	<b>\$619,817</b>	
Regulated Community		
Unpermitted (Registered) CAFOs	117	
Permitted CAFOs	90	
Permitted HCSFOS	10 water	70 air
Known AFOs	215	
Permit Processing		
New CAFO Permits Issued	3	
CAFO Permit Renewals	17	
CAFO Permit Amendments	1	
New HCSFO Permits Issued	0	
HCSFO Permit Renewals	1	
HCSFO Permit Amendments	0	
Inspections		
CAFOs/AFOs <sup>2</sup>	53	
HCSFOs (water/odor)	186	
Enforcement		
Compliance Advisories	5	
New Formal Enforcement Actions	0	
Complaints		
AFO	3	
CAFO	11	
HCSFO (odor)	8	

<sup>1</sup> Contracted services provide rapid complaint follow-up, compliance inspections and data system support.

<sup>2</sup> Includes compliance assurance and compliance assistance site visits.



## Other Significant Program Activities

Permit Renewals - In 2018, the program completed renewal of all 87 existing permitted CAFOs and issued new certifications to three CAFOs under the CAFO general permit that became effective on January 11, 2017. The program also began renewing the ten individual HCSFO permits. To date, four HCSFO permits have been drafted and issued. As part of the HCSFO renewal process, the program developed templates to assist producers in developing approvable Monitoring Plans.

Outreach, Training and Technical Assistance - The program continues to collaborate with the regulated community, local health departments, other state agencies, agricultural trade groups and the public to address concerns and work towards greater efficiencies and environmental results. Due to the program's efforts, compliance rates in 2018 for each regulated sector continued to be very strong. Data from the program's inspection process demonstrates compliance rates at Permitted CAFOs was approximately 95%, registered CAFOs was approximately 84%, and HCSFOs had greater than 98% compliance with regulatory requirements. The number of days required for a facility to return to compliance following documentation of a violation continued to decline in 2018. On average permitted CAFOs returned to compliance in 33 days, a 75% decrease since 2016, registered CAFOs in 108 days, a 20% decrease since 2016, and HCSFOs within nine days, a 75% decrease since 2016.

Environment Leadership Program - The program was pleased to have two Colorado agriculture producers, Smithfield Food, Inc. and Mountain Prairie Farms, maintain Gold Leader status in 2018 under the Colorado Environmental Leadership Program (ELP). Gold Leader is the highest level of state recognition and indicates a company has continual environmental improvement goals that go beyond regulated compliance, has a minimum of two environmental achievements and has maintained a clean compliance record for at least three years. Smithfield Foods, Inc. was also one of three finalists for the 24-Karat Gold Leader Challenge award. Companies competing for this award have been nominated and voted on by the other gold leader companies for sustainability initiatives that exhibit environmental, economic and social benefits. The ELP is a voluntary program that encourages and rewards Colorado businesses that demonstrate superior environmental stewardship.

Nitrogen Concerns in Rocky Mountain National Park (RMNP) - During 2018, the program continued participation in the RMNP Agricultural Subcommittee's activities to address elevated levels of nitrogen in the park. The subcommittee is coordinated by the division's Sustainability Program and 2018 efforts included continued progress in the core strategy areas of research, monitoring, and outreach to promote voluntary ammonia emissions reductions in the Front Range agricultural community.

2018 research efforts focused around developing a greater understanding of agricultural BMP efforts and areas where additional progress can be made. This included continued assessment of the potential impact of ammonia reduction BMPs and the initial steps toward completing a producer BMP survey. This survey will assess the current use of BMPs and barriers to adoption. Analysis of BMP information will help determine how many animals or acres of crops are under specific BMPs and where gaps may exist. These data



and research efforts will help to inform the development of the Ag Subcommittee's 5-year plan, which will be completed in 2019.

Monitoring and outreach efforts in 2018 included continued use of the Early Warning System (EWS), which provides alerts to producers when weather-conditions may increase deposition of reactive nitrogen into RMNP. 52 stakeholders and producers are currently on the list to receive EWS alerts. Monitoring of ammonia included the final year of a 2014-2018 project to collect high time resolution ammonia concentration data from a network of monitors in RMNP, Loveland and Greeley, Colorado. Outreach efforts by Ag Subcommittee stakeholder's utilized a list of agricultural BMPs that can help animal and crop producers reduce ammonia emissions.

Program Staffing - Staffing for the Environmental Agriculture Program remained consistent through 2018. Staff continues to improve work processes and production efficiencies that provide timely and exceptional customer service to the regulated community and to the citizens of Colorado.

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**For additional information or questions:**

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