Water Quality **Permitting for CAFOs in** Oregon

Joint Hearing of Committee on Agriculture, Land Use, and Water

Feb. 28, 2023

OREGON







DEQ Department of Environmental Quality

Water Quality Permitting for CAFOs in Oregon

- CAFO Permitting Process
 - Jennifer Wigal (DEQ)
 - Wym Matthews (ODA)
- Water Supply & CAFOs
 - Bryn Hudson (OWRD)
- Air Quality related to CAFOs
 - Michael Orman (DEQ)
- Ag Land Use Planning & "Right to Farm"
 - Jim Johnson (ODA)



State of Oregon
DEQ Department of Environmental Quality





CAFO Permitting Process

State of Oregon
DEQ Department of Environmental Quality



OREGON **DEPARTMENT OF** AGRICULTURE

CAFO: Defined

CAFO Definition OAR 603-074-0010(3)

The concentrated confined feeding or holding of animals or poultry

- In buildings or in pens where the surface has been prepared with concrete, rock or fibrous material to support animals in wet weather; or
- That have wastewater treatment works; or
- That discharge any wastes into waters of the state; or
- An animal feeding operation that is subject to regulation as a concentrated animal feeding operation pursuant to 40 CFR 122.23





CAFO Program History

- Oregon Department of Agriculture (ODA) and Oregon Department of Environmental Quality (DEQ) have a long history of cooperating to oversee the CAFO program
- ODA operates the program under a Memorandum of Understanding with DEQ
- The US Environmental Protection Agency also has oversight of the state's program
- The program currently has 504 permitted facilities throughout the state





Federal CAFO Permitting Requirements

- CAFO under federal rules is a Concentrated Animal Feeding Operation of a certain size or significant contributor of pollutants
- ODA/DEQ CAFO Program exceeds federal CWA requirements
 - No size limitation; need for permit coverage dependent on characteristics
- Oregon permit requirements are the same as required in Federal CAFO rule





CAFO Water Quality Permits

National Pollutant Discharge Elimination System (NPDES)

- Federal permit issued by state
- 5 year term
- Authorizes and regulates <u>surface water</u> discharge
- State adds conditions to protect groundwater

Water Pollution Control Facility (WPCF) ORS 468B

- State permit issued under state law
- 10 year term
- Authorizes and regulates <u>groundwater</u> discharge only





ODA & DEQ – MOU Roles and Responsibilities

ODA	DEQ
Approves Permit coverage Reviews and approve plans and specifications	Assists in review of plans
Determines Compliance	Provides technical/subject matter expertise
Maintains permitting and compliance database	Provides WQ program training and guidance as needed

ODA and DEQ work together on developing water quality permits





DEQ-Issued Water Quality Permits may be required for a CAFO

- A NPDES construction stormwater general permit (1200-C) for construction related land disturbance > 1 acre
 - only for stormwater discharges during construction activity
 - does not authorize discharge of wastewaters associated with operation of a CAFO
- Disturbance > five acres requires a 14-calendar day public notice period
- Only valid for stormwater discharges during construction activity





CAFO Permit Issuance Process

- All Permits drafted by both agencies
- All General and Individual CAFO permits have a public Notice and participation opportunity and a public hearing
- ODA /DEQ responds to all comments received during Notice
- Agencies can adopt Permit as Noticed, modify the Permit in response to comments or decline to issue the Permit
- Administrative activities to maintain the Permit(s) and each permit registrant's status is a large part of the program.



Permit Issuance Process New Special Conditions

- Increased frequency of post-harvest soil sampling for nitrate
- Water supply plan for new large CAFOs or CAFOs expanding to Large
- Drinking water well nitrate monitoring
- CAFOs in GWMAs have new construction standards OAR 340-052
- Two step construction inspection for new, Large CAFOs and expansions to Large
- New EPA NPDES e-reporting requirements



Water Quality Permit Application Process

- CAFO Water Quality Permit Application materials
 - ODA CAFO Permit application form
 - Land Use Compatibility Statement (LUCS)
 - Nutrient Management Plan (NMP) must include Minimum Required Elements listed in CAFO Permit S3.C
 - Application fee



Water Quality Permit Application Process

Water Quality General Permit Application Process

- ODA receives / reviews the application and works with applicant to ensure it is complete
- ODA and DEQ work together to determine what CAFO permit is appropriate (this may require consultation with the applicant).
- ODA coordinates permit/NMP review and feedback with DEQ, OWRD, and OHA to review permit and NMP
- ODA release permit application materials for **public comment**
 - Notice to the public issued. Self sign up for notifications.
 - 35-day public comment period begins
 - Public hearing required for all new, NPDES registrations and all new, Large WPCF registrations
- ODA reviews all <u>public comments, responds to comments</u> and may add conditions to permit
- ODA-DEQ decision point



Communication and Outreach

Communication Plan

- Local outreach
- Dedicated position to outreach to Tribes
- Stakeholder outreach
- Outreach to elected officials
- Notifications: email, text, web, social media, press



New CAFO Permit Applications Data

- 2015 14 new ATR
- 2016 7 new ATR
- 2017 13 new ATR
- 2018 12 new ATR
- 2019 8 new ATR
- 2020 14 new ATR
- 2021 7 new ATR
- 2022 4 new ATR

*ATR - application to register

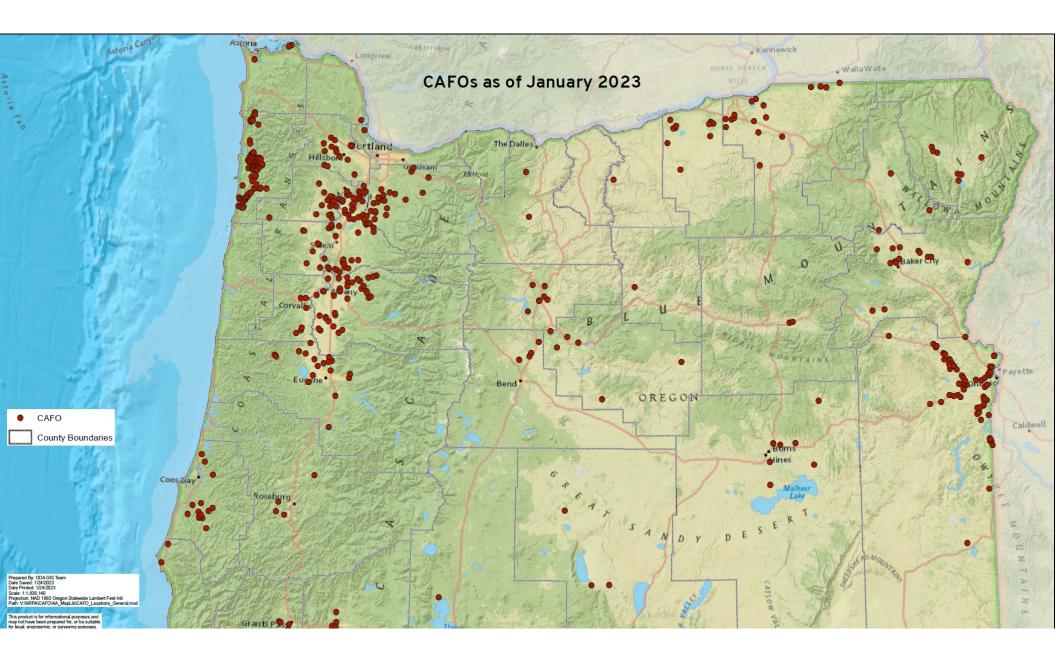
- 6 Feedlot, 5 Dairy
- 3 Dairy, 2 Chicken
- 5 'Other', 2 Dairy
- 4 Chicken, 2 Feedlot
- 3 Dairy, 2 Feedlot
- 5 Dairy, 3 Feedlot
- 3 Feedlot, 2 Dairy
- 2 Feedlot, 1 Chicken



CAFO Permits

Permit Type	Facilities Eligible for Coverage	Facilities Registered	Expiration Date
NPDES General Permit	Potential for surface water discharge Can elect coverage	362	Feb. 28, 2021
WPCF General Permit	Potential for groundwater discharge only	143	Sept. 30, 2025
Individual NPDES or WPCF	Facilities in GWMAs that land apply, use experimental technology, or have a significant noncompliance history	5	Varies by individual permit





CAFO Permit by type

Permit Type	# Facilities Registered	Small	Medium	Tier 1 Large	Tier 2 Large
Mature Dairy Cows (General Permit)		<200	200-699	700-2,499	2,500 or more
Mature Dairy Cows Individual Permit)		N/A	N/A	<10,000	10,000 or more
NPDES General Permit	183	50	94	30	13
WPCF General Permit	45	24	15	1	0
Individual NPDES	4			3	1
Individual WPCF	1			1	



CAFO Dairy Permit Numbers

Permit Type	# Facilities Registered	Small	Medium	Tier 1 Large	Tier 2 Large
Mature Dairy Cows (General Permit)		<200	200-699	700-2,499	2,500 or more
Mature Dairy Cows Individual Permit)		N/A	N/A	<10,000	10,000 or more
NPDES General Permit	183	50	94	30	13
WPCF General Permit	45	24	15	1	0
Individual NPDES	4			3	1
Individual WPCF	1			1	



CAFO Poultry Permit Numbers

Permit Type	# Facilities Registered	Small	Medium	Tier 1 Large	Tier 2 Large
Broiler Chickens (General Permit)		<37,500	37,500 – 124,999	125,000- 349,999	350,000 or more
Broiler Chickens Individual Permit)				<499,999	500,000 or more
NPDES General Permit	12	0	3	8	1
WPCF General Permit	12	3	3	3	3
Individual NPDES	0			0	0
Individual WPCF	0			0	0



CAFO Inspection Activities

- ODA staff conducts routine CAFO inspections on a 10-month schedule
- Larger or complex CAFOs facilities may receive more frequent inspections
- ODA staff respond to complaints, permittee requests for technical and planning assistance and follow up inspections as needed to assure compliance
- Two-Step construction completion, functionality and occupation inspections for all new, large CAFOs or existing CAFOs expanding to become large
- KPM Compliance rate 2022 = 97% of routine inspections in compliance



CAFO Permit Inspections

ODA CAFO Staff review the following activities to ensure Permit compliance

- Monitoring of Static Ground Water Levels
- Soil Moisture Monitoring and Hydraulic loading
- Soil testing The operator is required to collect annual soil samples from fields where manure, litter or process wastewater is applied
- Inspections of Production area and monitoring to prevent discharge
- Surveillance Sampling of drinking water wells at the CAFO for nitrate
- Recordkeeping The permit requires comprehensive record keeping and reporting requirements to ensure permit conditions are met
- 24 Hour Reporting For any discharge or other Permit non-compliance



Dairy CAFO Characteristics

- Manure and mortality storage can be affected by weather, lagoon and open lots
- All dairies have liquid manure systems
- Small percentage of manure is solid
- Large amounts of process water required
- All dairies land apply. ~50% dairies can export a portion of manure
- Dairy drinking water consumption Dairy Cows = 21.4 gallons/day/AU
- Compliance rate all inspection types. Facilities more affected by weather
 - Dairy 94.4%
 - Beef 95.1%



Poultry CAFO Characteristics

- Litter, manure and mortalities all inside a structure
- No liquid manure systems
- All litter/manure is dry
- Small amounts of process water required
- 86.5% of Oregon facilities export 100% of litter / manure and mortality compost
- Ten-year average amount to fertilizer manufacturing is 10,069 tons/year
- Poultry drinking water consumption Broiler Chickens = 17.2 gallons/day/AU
- Compliance rate all inspection types
 - Poultry 97.0%



Neighboring States CAFO Permitting Requirements

• Washington Has a CAFO General NPDES Permit

- 26 Registrants, One (1) poultry facility
- Does not have a state CAFO permit
- Egg wash / processing covered under a different WQ Permit

Idaho

Has a CAFO General NPDES Permit

- 0 (zero) registrants
- Does not have a state CAFO Permit
- California
- Has a CAFO General NPDES Permit
 - 141 Registrants
 - Has a state CAFO Permit (CAF Permit)
 - May require air quality Permit depending on location



Water Supply and CAFOs

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OWRD and CAFOs

- Process water right applications and transfers
- Well construction and compliance
- Regulate and distribute water
- Review and advise on CAFO water supply plans



Water Rights







- Required to:
 - Appropriate surface, stored or groundwater
 - Construct a reservoir
 - Protect surface water instream
- Type of use, place of use, point of diversion/appropriation
- Transfer is required to change a water right





Authorized Sources of Water for CAFOs

Water rights

- New or existing authorized water use
- Transfer existing rights

Water right exemption

- Surface water
 - Livestock watering: only if stock could access stream
- Groundwater
 - Stock water: no limit for stock drinking water
 - Single Industrial or Commercial: 5,000 gallons pe
 - Does not include irrigation



Water Supply Plan

- Consult to understand water needs and proposed authorized sources
- Evaluate existing water rights or transfer applications for proposed water uses
- Stockwater exemption (groundwater) commonly used as authorized source for stock drinking water



Quantifying Exempt Uses

- 250k-280k exempt use wells statewide
 - Type of use can change over time
 - Multiple type of uses
 - Wells may pre-date well log requirements
- Department can require measurement devices on exempt and permitted wells
 - Difficult to quantify multiple uses on one well

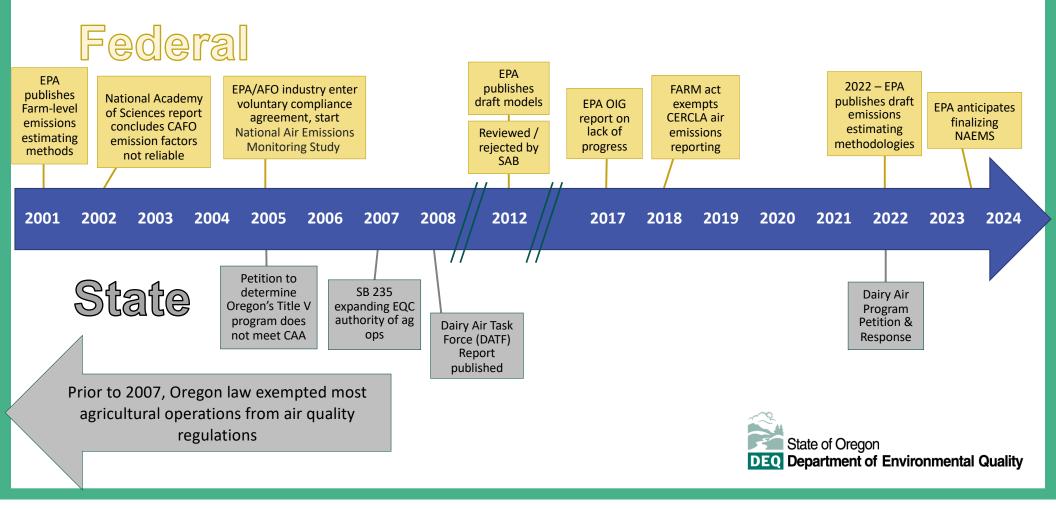




Air Quality related to CAFOs



Regulatory History



EQC's authority to regulate CAFOrelated air pollution

ORS 468A.020(2). Application of air pollution laws to agricultural operations is limited to the extent necessary to implement:

- the federal Clean Air Act
- a recommendation of the Dairy Air Task Force

ORS 468A.790. EQC and ODA shall enter into a MOU regarding air quality laws and agricultural operations

- ODA may perform any function of DEQ
- Considerations for the MOU





Agriculture, Land Use Planning, and the "Right to Farm" in Oregon



Oregon Agricultural Land Protection Program

Key Components

- Inventory Agricultural Land
- Protect Agricultural Land for Farm Use = EFU Zoning
- Contain Urban Development = UGBs
- Appropriate Level of Rural Services





Farm Use means:

- The <u>current employment</u> of land
- For the <u>primary purpose of obtaining a profit in</u> <u>money</u>
- <u>By raising, harvesting and selling</u> of crops or the breeding, management and sale of, or the produce of, livestock, poultry, fur-bearing animals or honeybees or for dairying and sale of dairy products or any other agricultural or horticultural use or animal husbandry or any combination thereof.

Farm Use

- Includes the preparation, storage and disposal by marketing or otherwise of the products or by-products raised on such land for human or animal use.
- Processing is not preparation.



Farm Use

Also includes the current employment of land for the primary purpose of obtaining a profit in money by stabling or training equines including but not limited to providing riding lessons, training clinics and schooling shows.

ORS 215.203(2)



Oregon's Right to Farm Law ORS 30.933

- Two major protection components:
- Immunity from private action
- Prohibition against regulation by local governments



Not a Blank Check



Immunity Components: Definition of "Nuisance or Trespass"

Includes but is not limited to, actions or claims based on noise, vibration, odors, smoke, dust, mist from irrigation, use of pesticides and use of crop production substances.



ORS 30.932



Immunity: Components Application

Immunity provided if:

- (a) Consistent with definitions (*farm* use, *farm*, etc.);
- (b) Lands are zoned for farm or forest use;
- (c) Complies with applicable laws
- (c) Regardless of change or interruption of use.
- Except....



Immunity: Key Elements Application

Immunity (even if consistent w/ criteria) not provided if an action or claim for relief involves:

(a) Damage to commercial agricultural products; or

(b) Death or serious injury.



Right to Farm:

- Involves a great deal of interpretation
- By a Circuit Court, not a regulatory agency



RTF Does not...

- Preclude a jurisdiction from regulating farm use from land use perspective.
- Preclude State or Federal regulation of farm use.



Local Ordinances

Any local government or special district ordinance or regulation now in effect or subsequently adopted that makes a farm practice a nuisance or trespass or provides for its abatement as a nuisance or trespass is invalid.

Applies to farm practices that would qualify for immunity under the law.



Questions?

