Approved: February 1, 2001
Date

MINUTES OF THE SENATE NATURAL RESOURCES COMMITTEE.

The meeting was called to order by Chairperson Robert Tyson at 8:30 a.m. on January 26, 2001 in Room 423-S of the Capitol.

All members were present except: All present

Committee staff present: Raney Gilliland, Legislative Research Department
Jill Wolters, Office of Revisor of Statutes
Judy Krase, Committee Secretary

Conferees appearing before the committee:
Karl Mueldener, Bureau of Water, KS Dept. of Health and Environment

Others attending: See attached list

Senator Tyson announced there will be hearings on **SB 37** and **SB 87** next Thursday (February 1) in committee, and on Friday (February 2) a report from the Water Office concerning water contracts. He then introduced Karl Mueldener from KDHE.

Karl Mueldener gave a rundown of the federal proposals for livestock waste management regulations (Attachment 1). He explained that these regulations would impact those producers with as few as 300 animal units in place. This proposal received December 15, 2000 will allow 2 years for implementation, according to EPA. Much of these federal regulations appear to catch up EPA to Kansas regulatory standards; however, the problem is these proposed federal regulations also have details contained within which would make implementation difficult for Kansas. Questions and discussion followed his presentation.

It was brought up by a committee member that these new proposed regulations may not be implemented in their present form due to the change of administration in Washington DC.

Senator Tyson announced that every Monday morning during session, he and the vice chair and the ranking minority would meet at 9:00 a.m. in 423-S to go over the week's agenda. He commented that this is an open meeting and anyone could be present.

The meeting adjourned at 9:15 a.m.

The next meeting is scheduled for February 1 at 8:30 a.m.

SENATE NATURAL RESOURCES COMMITTEE
GUEST LIST
DATE: January 26, 2001

NAME	REPRESENTING
Judy Moler	KAC
Sandy Shaw	Kearney Law Office
Tom Bruno	Allen & Assoc
Jim Allen	Seaboard
Joe Lieber	KS Co-op Council
Shelley King	KSPE/Gaches, Braden, Barbee & Assoc.
John Miller	Norton Co
Todd Johnson	KLA
Doug Wareham	KGFA/KFCA
Bill Howgill	Governor's Office
Kerri Ebert	Kansas Dairy Association
Greg A. Foley	KDA
John Hasch	KDHE
Joe Fund	KDHE
Karl Mueldener	KDHE
Adrienne Cole	Sen Tyson Office Staff
Sarah Kessinger	Harris News Service

PROPOSED FEDERAL REGULATIONS FOR LIVESTOCK FEEDING

- Introduces Federal Government into feeding facilities below 1,000
- Provides national consistence in permitting
- Vertical integration permits
- 0 discharge for swine/poultry
- Retains 24hr-25yr storm control
- Formal controls on land application
- "P" basis for land application
- Testing and records required on application sites

Senate Natural Resources Committee
Date 1-26-01

Attachment # 1

United States
Environmental Protection
Agency

Communications, Education,
And Media Relations
(1703A)

Environmental News

FOR RELEASE: FRIDAY, DEC. 15, 2000

EPA PROPOSES STRICT NEW CONTROLS TO REDUCE WATER POLLUTION FROM LARGE INDUSTRIAL FEEDLOT OPERATIONS

Robin Woods 202-564-7841

EPA today is proposing strict new controls to protect public health and the environment from one of the nation's leading causes of water pollution -- animal wastes from large, industrial feedlot operations.

EPA Assistant Administrator for Water, J. Charles Fox, said, "Wastes from large factory farms are among the greatest threats to our nation's waters and drinking water supplies. Today, EPA is taking action to protect public heal and the environment by significantly controlling pollution from animal feeding operations."

The livestock industry has undergone dramatic changes in the past 20 years, consolidating scattered, smaller facilities into fewer but vastly larger feeding operations that result in greater and more concentrated generation of wastes. An estimated 376,000 large and small livestock operations that confine animals generate approximately 128 billion pounds of manure each year. Typically these facilities confine beef and dairy cattle, hogs, and chickens.

Nationwide, nearly 40 percent of surveyed waters are too polluted for fishing or swimming. Some 60 percent of river pollution comes from all kinds of agricultural runoff, including livestock operations. Pollution from livestock associated with many types of waterborne disease, as well as problems like *pfiesteria* outbreaks which have plagued the Chesapeake Bay, red tides, algae blooms, and the dead zone in the Gulf of Mexico.

The new requirements would apply to as many as 39,000 concentrated animal feeding operations (CAFOs) across the country. Today, only an estimated 2,500 large and small livestock operations have enforceable permits under the Clean Water Act. A CAFO is currently defined as having 1,000 or more cattle or comparable "animal units of other livestock. Smaller operations may also be CAFOs if they are a threat to water quality. EPA today is co-proposing two options for a new CAFO definition. One proposed definition could include livestock facilities with more than 500 cattle or other animal units. The other proposal would require operations with 300-1000 cattle to have a permit if meet certain risk-based conditions.

In addition to stricter permitting requirements, the proposal includes several new strict controls: 1) poultry, veal and swine operations would be required to prevent all discharges from their waste storage pits and lagoons where wastes are collected; 2) the proposal eliminates potential exemptions from permits presently used in some states; as a result, EPA expects that all large livestock operations will now have to acquire permits; 3) under this proposal, EPA and the states will issue co-permits for corporations and contract growers to ensure financial resources exist to meet environmental requirements; 4) the spreading of manure on the land owned by livestock facilities would be limited to protect water ways.

In March 1999, EPA and the U.S. Department of Agriculture issued a Unified National Strategy for Animal Feeding Operations, in response to public concern about contamination of rivers, lakes, streams, coastal waters and

ground water from livestock manure. Today's proposal is an important step in that strategy.

EPA will take public comment for 120 days and will hold public meetings around the country on today's proposal. Additional information is available on EPA's Office of Water web site at: http://www.epa.gov/owm/afo.h
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R-192

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United States
Environmental
Protection Agency

Office of Water
Washington DC 20460

EPA 833-F-00-016
December 2000

EPA

Proposed Regulations for Animal Feeding Operations

from Concentrated Animal Feeding Operations (CAFOs)

Pollutants from agricultural sources, such as pesticides, fertilizers, and eroded soil, are the most common types of contaminants found in U.S. rivers and streams. Manure, dead animals, and other waste from livestock operations also contribute to this pollution problem.

Manure Accumulated in a Corral

Source: EPA Region 9

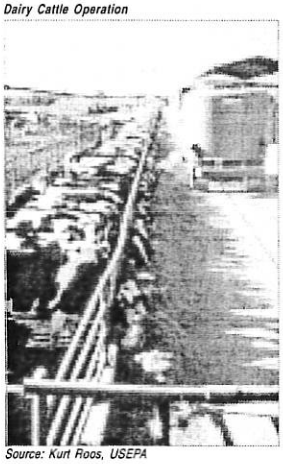
The U.S. Environmental Protection Agency (EPA) is proposing regulations to reduce the amount of water pollution from large livestock operations. Revisions to current Clean Water Act permit requirements and effluent guidelines for as many as 39,000 concentrated animal feeding operations or "CAFOs" will reduce pollution from one of the Nation's leading sources of water pollution—agriculture—and protect public health. This proposal will update regulations that are more than 20 years old and will result in more effective, nationally consistent regulations to protect water resources.

Why does EPA want to change the NPDES regulations and effluent guidelines for CA Os?

Nearly 40 percent of the Nation's surveyed waters are too polluted for fishing or swimming. According to the *1998 National Water Quality Inventory*, approximately 60 percent of this pollution in rivers and streams and 45 percent in lakes comes from agricultural sources. An estimated 376,000 livestock operations confine animals in the United States, generating approximately 128 billion pounds of manure each year. Concentrated animal feeding operations (CAFOs) are the largest of these livestock operations and are regulated under the Clean Water Act.

In response to public concern about contamination of rivers, lakes, streams, coastal waters, and ground water from livestock manure and other animal wastes from livestock operations, EPA and the U.S. Department of Agriculture developed the *Unified National Strategy for Animal Feeding Operations* in March 1999, as part of the *Clean Water Action Plan*. The strategy includes a national goal that all "AFOs should develop and implement technically sound, economically feasible, and site-specific comprehensive nutrient management plans (CNMPs) to minimize impact on water quality and public health." As part of this strategy, EPA announced that it would develop new approaches for improving existing regulations for the largest operations, CAFOs. EPA currently administers two Clean Water Act regulatory programs that pertain to CAFOs: National Pollutant Discharge Elimination System (NPDES) permits and effluent guidelines.

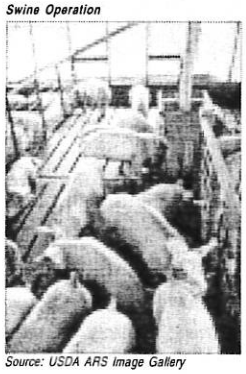
Dairy Cattle Operation



Source: Kurt Roos, USEPA

For more than 20 years, Clean Water Act NPDES permits and effluent guidelines for CAFOs have helped to improve the quality of our nation's waters. However, persistent reports of manure runoff and waste discharges from livestock operations show that the existing regulatory program for CAFOs does not adequately prevent water pollution.

Swine Operation



Source: USDA ARS Image Gallery

The livestock industry has undergone dramatic changes in the past 20 years. The continued trend toward fewer but larger operations, coupled with greater emphasis on more intensive production methods and specialization, is concentrating more manure and other animal waste constituents within some geographic areas. This trend has coincided with increased reports of large-scale discharges from these facilities, as well as continued runoff of nutrients that are contributing to the significant increase in pollution of many waterways. In addition, more and more of the larger livestock facilities are concentrated in non-agricultural areas where there is inadequate land to accommodate the useful application of the animal manure they produce.

Inconsistent interpretation of current regulations over the years by state and federal regulators has resulted in

Why is livestock waste a water quality concern?

Runoff from livestock operations enters water bodies when poor maintenance of waste lagoons, improper design of storage structures, improper storage of animal waste, and excessive rainfall result in spills and leaks of manure-laden water. Overapplication of manure to cropland is another source of animal waste runoff. When livestock manure and other animal waste spills or leaks into surface or ground water it can create an immediate threat to public health and water resources. This runoff has nutrients such as, nitrogen and phosphorus that in excess cause algae and other microorganisms to reproduce in waterways, creating unsightly and possibly harmful algal blooms. Explosive algae populations can lower the level of dissolved oxygen, which can cause fish and other aquatic organisms to die. Spills from ruptured waste lagoons and other faulty storage facilities have killed tens of thousands of fish. Animal waste runoff can also be a threat to the health of people who come into contact with affected waters because some of the microbes (bacteria, protozoa, and viruses) in animal waste can cause disease.

Algal Bloom

Source: USDA ARS Image

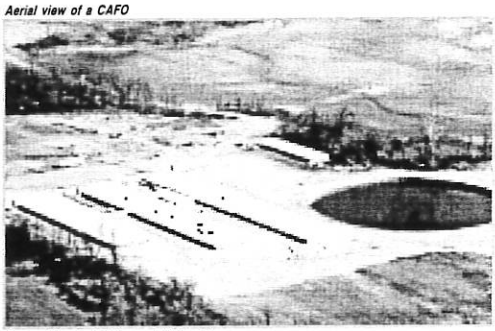
inadequate permitting and enforcement practices across the country. Public concern, changes in the livestock industry, persistent water quality problems, and public health risks have demonstrated the need for simpler, nationally consistent regulations that are more easily implemented and enforced to protect public health and water resources.

What are the **CURRENT** *CAFO regulations?*

Under the Clean Water Act, CAFOs are defined as point sources of pollution and are therefore subject to NPDES permit regulations. Under these regulations, CAFOs are defined as facilities with 1,000 or more animal units (AU). They are not considered CAFOs, however, if they discharge only during a 25-year, 24-hour storm. An animal feeding operation (AFO) that confines 300 to 1,000 AU is defined as a CAFO if it discharges pollutants through a man-made structure or if pollutants are discharged to waterways that run through the facility or come into contact with the confined animals. The authority that issues NPDES permits may also designate any AFO, including those with fewer than 300 AU, as a CAFO if it meets the definitions above and is a significant source of water pollution.

Although the NPDES regulation identifies who needs a permit, the effluent guidelines establish national requirements regarding the types and amount of pollutants a permitted CAFO with 1,000 AU or more is allowed to discharge. EPA established the effluent guidelines for feedlots in 1974 based on the best technology available that was economically feasible for the industry. The current effluent guidelines do not allow discharges of pollutants into the Nation's waters except when a chronic or catastrophic storm causes an overflow from a facility that has been designed to contain manure and runoff during a 25-year, 24-hour storm. Discharge limits for permitted facilities with fewer than 1,000 AU are established using the permit writer's best professional judgment.

Aerial view of a CAFO



Source: Hoosier Environmental Council

Proposed definitions for CAFOs

Animal Type	Two-Tier Structure	Three-Tier Structure	
	# of animals equal to 500 AU	# of animals equal to 1,000 AU	# of animals equal to 300 AU
Beef Cattle and Heifers	500	1,000	300
Veal Cattle	500	1,000	300
Dairy Cattle (mature milked or dry)	350	700	200
Swine (>55 lbs)	1,250	2,550	750
Immature Swine (≤55 lbs)	5,000	10,000	3,000
Turkeys	27,500	55,000	16,500
Chickens	50,000	100,000	30,000
Horses	250	500	150
Sheep or Lambs	5,000	10,000	3,000
Ducks	2,500	5,000	1,500

What **CHANGES** *is EPA proposing for the NPDES CAFO regulations?*

EPA is proposing several changes to the NPDES regulations that define which facilities are AFOs and which are CAFOs (that is, subject to the NPDES program) and includes specific requirements in NPDES permits for CAFO manure at both production and land application areas.

Definition of an animal feeding operation

- The proposed changes to this definition are intended to help permit writers and permit holders clearly distinguish between confined facilities and operations with only pasture or grazing land. Operations that maintain animals in confinement are considered AFOs.

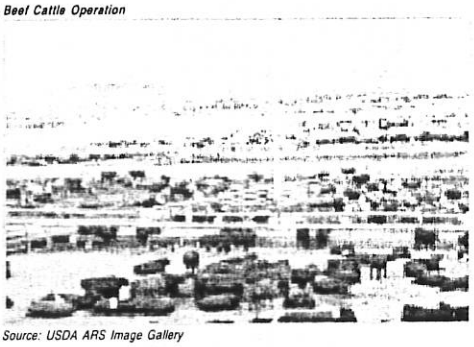
Definition of a concentrated animal feeding operation

- EPA is asking for comments on two alternative structures for defining CAFOs (see table above):
  - A three-tier structure in which an AFO is a CAFO if it has more than 1,000 AU, or if it has 300 to 1,000 AU and it meets certain conditions, or if the permit authority designates the facility. All facilities with 300 to 1,000 AU must either certify that they do not meet the conditions for being defined as a CAFO or must apply for a permit; or
  - A two-tier structure in which an AFO is a CAFO if it has 500 AU or more. Facilities with fewer than 500 AU may become CAFOs only if designated by the permit authority.
- Including new animal types in the NPDES program:
  - Dry manure handling poultry operations
  - Stand-alone immature swine and heifer operations
- Imposing a duty to apply for a permit on all CAFOs.
- Eliminating the 25-year, 24-hour storm permit exemption.
- Eliminating the "mixed animal type calculation."

Land application of CAFO manure

- Including the land application area in the CAFO definition.
- Requiring each CAFO to prepare and implement a site-specific permit nutrient plan (PNP), that is prepared or approved by a certified planner, that identifies the nutrients generated at the facility, determines the amount of nutrients needed by the planned crop rotation, and establishes agronomic rates of manure application.
- Clarifying that the agricultural storm water exemption is applicable only where CAFO manure is land-applied according to proper agricultural practices.
- Proposing two options for recipients of CAFO manure:
  - Recipents must certify they are land-applying at proper agronomic rates unless there is a state program for addressing excess manure.
  - No certification is required, but the CAFO operator must maintain records of manure transferred.

Beef Cattle Operation



Source: USDA ARS Image Gallery

Permit requirements

- Requiring processors that exercise substantial operational control over contract growers to be co-permitted.
- Requiring a CAFO to maintain a permit until the facility is properly closed, including proper closure of manure storage.
- Clarifying the NPDES requirements pertaining to discharges to ground water through a direct hydrological connection to surface water.
- Improving public access to information in the following ways:

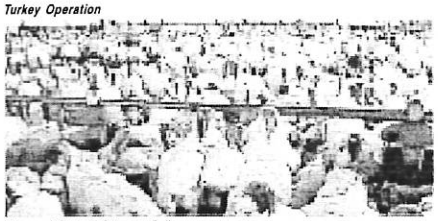
- Requiring the permit authority to publish quarterly a list of CAFOs covered under a general permit. (A general NPDES permit is written to cover a category of point sources with similar characteristics [such as CAFOs] for a defined geographic area.)
- Requiring permittees to submit a notice that they have developed or amended the PNP.
- Proposing the CAFO operator make the executive summary of the PNP publicly available upon request and considering making the entire PNP publicly available.
- Proposing that states must conduct a public process for determining when individual permits must be issued.

What regulatory **CHANGES** *is EPA proposing for the effluent guidelines?*

EPA is proposing several changes to the effluent guidelines for CAFOs, including guidelines concerning animal confinement and manure storage areas, and land application and off-site transfer of manure.

- Applying the effluent guidelines to all defined CAFOs including CAFOs with 1,000 AU.
- Clarifying that the effluent guidelines apply to layer and broiler operations using dry manure handling (consistent with revisions being proposed for the NPDES permit regulation).
- Eliminating the provisions that apply to operations with more than one animal type ("mixed operations").

Turkey Operation



Source: USDA ARS Image Gallery

- Revising the applicability of the rule to specifically include swine nurseries and heifer operations.
- Establishing a new subcategory that applies to veal operations.
- Establishing limitations and technical standards for all existing and new operations defined as a CAFO.

Animal confinement and manure storage areas

- Requiring all beef and dairy CAFOs and new swine, poultry, and veal CAFOs to perform an assessment to determine whether a hydrologic link exists from ground water beneath the feedlot and manure storage area to surface water.
- Adopting a zero discharge requirement with no overflow allowance for swine, veal, and poultry CAFOs.
- Requiring routine inspections of the production area to ensure that wastewater and manure handling and storage are functioning properly.
- Requiring installation of depth markers for liquid impoundments (e.g., lagoons, ponds, and tanks) that are open and capture precipitation.
- Requiring CAFOs to handle dead animals in ways that prevent contributing pollutants to waters.

Land application and off-site transfer of manure

- Requiring the CAFO operator to determine the nutrient needs of their crops based on realistic crop yields, to sample soil to determine nutrient content, and to prohibit operators from applying manure in quantities that exceed the land-application rate calculated using either Phosphorus Index, Phosphorus Threshold, or Soil Test Phosphorous Method (NRCS 590 Standard).
- Establishing setback requirements that would prohibit applying manure and wastewater within 100 feet of surface water.
- Requiring CAFOs to maintain records on the amount and destination of manure and wastewater transferred off-site.

Poultry Operation

Source: USDA ARS Image Gallery

What are the costs of the proposed regulations?

EPA estimates that the proposed regulations will result in compliance costs to CAFO operators of $850 million to $940 million per year, depending on which proposals are finalized.

How many CA Os will be regulated?

EPA's proposals would regulate between 26,000 and 36,000 AFOs or 5 to 10 percent of all AFOs, and would address 60 to 70 percent of all AFO manure.

When will the proposed regulations become final and be implemented?

EPA plans to take final action on these regulations by December 15, 2002 (published approximately by January 2003).

For newly defined CAFOs, permits will not be required until 3 years after final regulations are published (January 2006).

Once the proposed regulations are final, the new requirements are immediately in effect for new or reissued permits.

How to obtain a copy of the proposed regulations:

On December 15, 2000, Administrator Browner signed the proposed revisions to the NPDES regulations and effluent guidelines for CAFOs. The *Federal Register* will publish these proposed revisions. You can obtain a copy by going to the EPA Office of Wastewater Management's web site at http://www.epa.gov/owm/afo.htm.

How to comment on the proposed regulations:

EPA encourages all interested individuals and groups to comment on these proposed regulations. The public comment period begins on the day the regulations are published in the *Federal Register* and is open for comment for 120 days. You may send your comments to EPA in a number of ways.

- By e-mail: CAFOs.comments@epa.gov
- By postal service:

  Concentrated Animal Feeding Operation Proposed Rule
  USEPA Office of Water
  Engineering and Analysis Division (4303)
  1200 Pennsylvania Avenue, NW
  Washington, DC 20460

- By hand delivery:

  Concentrated Animal Feeding Operation Proposed Rule
  USEPA
  401 M Street, SW
  Room 611 West Tower
  Washington DC 20460

Please submit any references cited in your comments. Please submit an original and three copies of your written comments and enclosures.

EPA suggests that you contact organizations of which you are a member to find out if the organizations are commenting on the proposed regulations.

If you have any questions about this process, please call the CAFO HOTLINE at (202) 564-0766.

United States
Environmental Protection
Agency (4203)
Washington, DC 20460

Official Business
Penalty for Private Use $300

Where can I find more information on CA Os?

Additional information on NPDES regulations and effluent guidelines affecting CAFOs can be obtained by contacting the EPA headquarters Office of Wastewater Management and Office of Science and Technology, or your nearest EPA Regional Office contact listed below.

Office of Wastewater Management
Permits Division (4203)
United States Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
(202) 564-0766, (202) 564-6384 Fax

Office of Science and Technology
Engineering and Analysis Division (4303)
United States Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
(202) 564-0766, (202) 260-7185 Fax

Mr. Bruce Rosinoff
Office of Ecosystem Protection
United States Environmental Protection Agency
Region 1, One Congress Street
John F. Kennedy Federal Building
Boston, MA 02203-0001
(617) 918-1698, (617) 918-1505 Fax

Ms. Andrea Coats
Division of Environmental Planning and Protection
United States Environmental Protection Agency
Region 2, 290 Broadway
New York, NY 10007-1866
(212) 637-3850, (212) 637-3772 Fax

Ms. Mary Letzkus
Water Protection Division
United States Environmental Protection Agency
Region 3, 1650 Arch Street
Philadelphia, PA19103
(215) 814-2087, (215) 814-2301 Fax

Ms. Hilda Hatzell
Water Management Division
United States Environmental Protection Agency
Region 4, 61 Forsyth Street
Atlanta, GA 30303
(404) 562-9445, (404) 562-8692 Fax

Mr. Stephen Jann
Water Division
United States Environmental Protection Agency
Region 5, 77 West Jackson Boulevard
Chicago, IL 60604-3507
(312) 886-2446, (312) 353-4135 Fax

Mr. Kenneth Huffman
Water Quality Protection Division
United States Environmental Protection Agency
Region 6, Fountain Place 12th Floor, Suite 1200
1445 Ross Avenue
Dallas, TX 75202-2733
(214) 665-7504, (214) 665-2191 Fax

Mr. Ralph Summers
Water, Wetlands and Pesticides Division
United States Environmental Protection Agency
Region 7, 726 Minnesota Avenue
Kansas City, KS 66101
(913) 551-7418, (913) 551-7765 or 7165 Fax

Ms. Debbie Thomas
Office of Enforcement, Compliance, and Environmental Justice
United States Environmental Protection Agency
Region 8, 999 18th Street, Suite 500
Denver, CO 802002-6312
(303) 312-6373, (303) 312-6409 Fax

Ms. Shirin Tolle
Water Division
United States Environmental Protection Agency
Region 9, 75 Hawthorne Street
San Francisco, CA 94105
(415) 744-1898, (415) 744-2499 Fax

Mr. David Allnut
Office of Water
United States Environmental Protection Agency
Region 10, 1200 Sixth Avenue
Seattle, WA 98101
(206) 553-2581, (206) 553-0163 Fax