

**APPENDIX A:
LIST OF ITEMS DISTRIBUTED TO SMALL BUSINESS STAKEHOLDERS FOR THE
SEPTEMBER 17, 1999
CONFERENCE CALL**

All documents that were sent to small business stakeholders are listed below:

1) Letter entitled, “Information Regarding Identification of Small Entity Representatives to Provide Input to the Process of Developing Proposed Revisions to EPA for Concentrated Animal Feeding Operations (CAFOs)” — This letter was sent only to those individuals (i.e., potential Small Entity Representatives and/or individuals assisting in the identification of potential Small Entity Representatives), that requested to see more background information on both the SBREFA process and the proposed rulemaking. The following attachments were also enclosed:

- EPA Activities Related to the Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), June 1999 (EPA 223-F-99-001)
- Information for Potential Small Business Advocacy Review Panel Process, July 1999 (EPA 233-F-99-002)
- USDA/EPA Unified National AFO Strategy Executive Summary
- 40 C.F.R. § 122.23, NPDES Regulation
- 40 C.F.R. § 412, Effluent Limitation Guidelines

DELIVERY DATE(S): The date that this letter was sent ranged from the end of July to the middle of August, 1999.

2) Outreach Package 1, contents included:

- “Background Information Regarding the Proposed Revisions to the NPDES CAFO Regulations”, August 31, 1999
- Attachment A — EPA Activities Related to the Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), June 1999 (EPA 223-F-99-001)
- Attachment B — Information for Potential Small Business Advocacy Review Panel Process, July 1999 (EPA 233-F-99-002)
- DELIVERY DATE: September 3, 1999

3) Outreach Package 2, contents included:

- “Information Regarding the Proposed Revisions to the NPDES Regulations for Concentrated Animal Feeding Operations”
- “2nd Mailing of Outreach Materials for Small Entity Representatives (SERs) Regarding Possible Revisions to the Effluent Guidelines Regulations for Beef, Dairy, Swine, and Poultry”
- “Baseline Description of the Confined Animal Feeding Industry”

DELIVERY DATE: September 9, 1999

4) Fax sent to all potential small business representatives, attachments included:

- Agenda for the Small Business Consultation on, September 17, 1999
- List of Participants for the Small Business Consultation on, September 17, 1999

DELIVERY DATE: September 16, 1999

**APPENDIX B:
SUMMARY OF SMALL BUSINESS CONSULTATION
CONFERENCE CALL ON CONCENTRATED ANIMAL FEEDING OPERATIONS
PERMIT RULE AND EFFLUENT LIMITATION GUIDELINES REVISIONS:
SEPTEMBER 17, 1999**

Background

On September 17, 1999 from 10:30 a.m. to 6:00 p.m. (ET), EPA convened four conference calls with a group of stakeholders to present and clarify information on potential revisions to regulations regarding concentrated animal feeding operations (CAFOs) and to request oral or written comments. The group of stakeholders were asked to provide comments to the EPA by October 1st for its use in advising the Small Business Advocacy Review (SBAR) Panel on these regulations, to be convened in mid-October.

EPA is in the process of considering revisions to two regulations that address CAFOs. These regulations are 1) the National Pollutant Discharge Elimination System (NPDES) CAFO regulations (40 CFR § 122.23), which define those animal feeding operations that are CAFOs and thereby point sources subject to the NPDES permit program; and 2) the feedlot effluent limitation guideline (ELG) (40 CFR § 412), which establishes the technology-based effluent standards that apply to certain CAFOs and are implemented through NPDES permits.

EPA is coordinating efforts to revise both the CAFO NPDES regulations and ELGs in order to address common issues and to provide administrative efficiency for EPA, States, and all interested groups. EPA anticipates that the NPDES regulations will be proposed in late 2000. EPA is required to propose revised ELG regulations for pork and poultry feedlot operations by the end of 1999 under a consent decree with the Natural Resources Defense Council (NRDC), and for beef and dairy operations by the end of 2000. EPA is pursuing an extension to the pork and poultry deadline. Depending upon the outcome of upcoming negotiations with NRDC, EPA is planning to issue the proposed ELG and NPDES CAFO rules in a coordinated manner in late 2000.

The meeting participants were:

EPA Office of Policy

Tom Kelly	Small Business Advocacy Chair
Jennifer Vernon	SBAC Staff Lead
Patrick Easter	SBAC Staff

EPA Office of Water, Office of Wastewater Management

Charles (Chuck) Sutfin	Director, Permits Division
Gail Cooper	Chief, Rural Branch
Shelley Fudge	NPDES Rule Lead
Ginny Kibler	Economist
William Hall	AFO Staff
Gregory Beatty	AFO Staff
Karen Metchis	CAFO SBREFA Lead

EPA Office of Water, Office of Science and Technology

Sheila Frace	Director, Engineering and Analysis Division
--------------	---

Janet Goodwin	ELG Rule Lead: Swine & Poultry
Ron Jordan	ELG Rule Lead: Beef & Dairy
Renee Johnson	Economist
Donald Anderson	Chief, Commodities Branch
Kristen Strellec	Economist

US Department of Agriculture, Natural Resource Conservation Service
 Obie Ashford AFO Staff

Small Business Administration

Jere Glover	Chief Counsel for Advocacy
Austin Perez	

Office of Management and Budget

Jim Laity
 Tammy Croote

EPA's Contractor Support

SAIC contractors

Stakeholders

Sector: Region (State)

Beef

Joel Hartman	Midwest (Iowa)
Reg Clause	Midwest (Iowa)
Galen Frenzen	Midwest (Nebraska)
Terry Handke	Central (Kansas)
Bob Lindsey	Central (Texas)
Steve Pilcher	Central (Montana)

Dairy

Jim Harsdorf	Midwest (Wisconsin)
Norman Jordan	South (North Carolina)
Scott Mason	Mid-Atlantic (New Hampshire)
Ed Nierman	Central (Missouri)
Bruce Roos	Pacific (Oregon)
Alfredo Roybal	Central (New Mexico)

Swine

Pat Adams	South (North Carolina)
Jay Foushee	South (North Carolina)
Glenn Keppy	Midwest (Iowa)

Chris Petersen	Midwest (Iowa)
Donna Reifschneider	Midwest (Illinois)
Barb Wiand	Mid-Atlantic (Pennsylvania)

Poultry (includes broilers, layers, and turkeys)

Broilers

Stephen Corrazza	Mid-Atlantic (Delaware)
V.O. Campbell	South (Mississippi)
Randy Tumlin	South (Alabama)

Layers

Earl Wetta	Midwest (Kansas)
Del Brock	South (Alabama)
Randy Johnson	South (Georgia)

Turkeys

Ken Mitchell	Pacific (California)
Marion Atkinson	Midwest (Kansas)
Tony Helfter	Midwest (Iowa)
Craig Miller	Mid-Atlantic (Virginia)

Other Sectors

Bison

Brian Ward	Midwest (Colorado)
------------	--------------------

Sheep

Pat O'Toole	Midwest (Wyoming)
-------------	-------------------

National Organizations

Don Parrish	American Farm Bureau Federation
John Pemberton	National Cattlemen's Association
Judy Morrison	National Contract Poultry Growers Association
Nancy Danielson	National Farmer's Union
Deb Atwood	National Pork Producers Council
Martha Noble	Sustainable Agriculture Coalition, Wallace Institute for Alternative Agriculture
Peter Wright	Cornell Cooperative Extension

Overview of the Meeting

The meeting consisted of four consecutive conference calls. The first call included all participants and consisted of an overview of the Small Business Regulatory Enforcement Fairness Act (SBREFA) and current regulations. The three subsequent conference calls were conducted for representatives of specific animal sectors and each included an explanation of the agenda, given by Tom Kelly, a presentation by Shelley Fudge on the NPDES revisions under consideration, and a presentation by Ron Jordan or Jan Goodwin on possible ELG revisions. These presentations were a review of information that was previously mailed to stakeholders. Time was allowed after each presentation for questions of clarification, and at the end of each call for discussion.

Introduction and Opening Remarks

Mr. Kelly opened the first conference call by discussing the day's agenda and explaining that the meeting was meant to be an informational meeting for stakeholders that may be appointed to advise as a Small Entity Representative (SER) should an SBAR Panel be convened as is expected. Mr. Kelly further explained that the NPDES regulations and the two parts of the ELG regulations would be discussed in concert due to the similarity of their associated issues. Mr. Kelly then asked the participants in the room to identify themselves and conducted a role-call introduction of the stakeholders.

Background on Current NPDES and ELG Regulations

Current NPDES Regulation

Chuck Sutfin provided an overview of the current NPDES regulations. In November, 1972, the Federal Water Pollution Control Act Amendments (FWPCA) were passed into law by the U.S. Congress. The FWPCA established national policy concerning water quality and set forth four important principles that have shaped the program over its 25-year history. These principles are: (1) the discharge of pollutants to waters of the U.S. is not a right, (2) a permit is required to discharge effluent to waters of the U.S. and limits the amount of pollutants that may be discharged, (3) wastewater must be treated with the best treatment technology that is economically achievable, regardless of the condition of the receiving water, and (4) effluent limits must be based on treatment technology performance and, where needed, more stringent limits can be imposed to meet water quality standards for a receiving water body.

Title IV of the FWPCA created the system for permitting wastewater discharges (Section 402), known as the National Pollutant Discharge Elimination System (NPDES). The purpose of the NPDES Program is to protect human health and the environment through controlling the types and amounts of pollutants that can be discharged into waters of the United States. To address such discharges, the Clean Water Act (CWA) requires that all point sources discharging pollutants into waters of the U.S. must obtain a NPDES permit. Under the CWA, the term "point source" expressly includes concentrated animal feeding operations (CAFOs).

NPDES permits control the discharge of pollutants primarily through the imposition of effluent limitations and other permit conditions. These limitations may be based on the technology available to treat the effluent. Where technology-based effluent limits are inadequate to ensure compliance with water quality standards applicable to the receiving water, more stringent limitations may be set. NPDES permits also normally include monitoring and reporting requirements, special conditions (i.e., conditions that supplement the effluent guidelines, such as best management practices), and standard conditions (i.e., conditions that apply to all NPDES permits, such as the duty to comply with the permit's conditions).

NPDES permits may be issued by U.S. EPA or those States, Territories, and Tribes authorized by EPA to implement the NPDES Program. Currently, 43 States and the Virgin Islands are authorized to issue NPDES permits. EPA Regional offices issue NPDES permits in the remaining States and Territories. Authorized State programs must be as stringent as the Federal NPDES program but need not impose identical requirements. These State programs may impose requirements that are more stringent than the Federal program.

A NPDES permit may consist of an individual permit tailored for an individual facility or a general permit applicable to multiple facilities within a specific category. Where an individual permit is issued, facility-specific information is submitted to the State or EPA as part of a NPDES permit application, that information is reviewed, and a permit is drafted. A fact sheet explaining the draft permit is prepared, and the draft permit and fact sheet are published for public review and comment. Following consideration of such comments by EPA or an authorized State, a final permit is issued. Specific procedural requirements apply to NPDES permit modification, revocation and reissuance, and termination. The permits are subject to a maximum five-year term, but may be automatically continued in specific circumstances.

General NPDES permits are available to address numerous similar operations on an area-wide basis. General permits are not developed based on facility-specific information, rather, they are developed based on available data that characterize the type of operations being addressed and the pollutants being discharged. Once a general permit is drafted, it is published for public review and comment accompanied by a fact sheet that explains the permit. Following EPA or State consideration of public comments, a final general permit is issued. The general permit specifies the type or category of facilities that may obtain coverage under the permit. Those facilities that fall within this category and that desire coverage under the general permit then must submit a notice of intent (NOI) to be covered. It is anticipated that general NPDES permits will be used to a greater extent than individual permits to address CAFOs.

Current Effluent Limitations Guideline (ELG) Regulation

After Mr. Sutfin's presentation, Sheila Frace gave an overview of the current ELG regulation and an explanation of the relationship between the NPDES regulation and the ELG.

How Are Effluent Limitations Guidelines And The NPDES Permit Program Related?

Since the mid-1950s, major sources of water pollution have been linked to both industrial and municipal wastes. Industrial wastewaters, including wastewaters from animal feeding operations, have been found to contain pollutants which have harmful effects on receiving waters and adverse effects on human health and aquatic life. Growing environmental concerns about these harmful effects led the United States Congress to establish a national regulatory program in the early 1970s. Under the Clean Water Act (CWA), which has been amended several times since its enactment, EPA has broad authority to control discharges of pollutants into U.S. waters.

The NPDES permit program is one of the centerpieces of the CWA's water pollution control programs. The CWA establishes a structure whereby all discrete sources of pollutants (known as "point sources") must obtain a permit which regulates the facility's discharge of pollutants into water of the United States. This permit program, known as the National Pollutant Discharge Elimination System (NPDES), is focused on controlling pollutants determined to be harmful to receiving water, and on the sources of such pollutants. NPDES permits implement a multi-faceted approach to protecting water quality. At the core of these permits is a two-pronged control strategy that incorporates both technology-based effluent limitations guidelines and, where necessary, more stringent site-specific limits based on water quality considerations.

The discharge limits imposed in a permit are arrived at by consideration of two factors: 1) the effluent quality that is both economically achievable and technologically attainable through operation of control technologies and process changes (i.e., effluent limitations guidelines); and 2) regional or site-specific water quality considerations. Generally, technology-based limits are established as uniform, national requirements that define the minimum level of control imposed at the point of discharge ("end-of-pipe"), whereas the water quality-based limits reflect more restrictive controls necessary to achieve the desired ambient water quality. These water quality-based limits usually provide allowance for dilution in the water column.

What Are Effluent Limitations Guidelines And How Are They Developed?

Effluent guidelines are uniform national standards that are developed by EPA on an industry-by-industry basis, and are intended to represent the greatest pollutant reductions that are economically achievable for an industry sector (e.g., CAFOs). These limits are applied uniformly to every facility in the industrial sector falling within the scope defined by the regulations (e.g., CAFOs confining over 1,000 animal units), regardless of the condition of the waterbody receiving the discharge. To develop these technology-based regulations, EPA first gathers information about the industry's typical wastewater characteristics and treatment technologies used to treat the discharge. In evaluating controls available for an industry, EPA considers the age of equipment and facilities involved, processes employed, potential process changes, engineering aspects of applying various types of control techniques, the cost of achieving effluent reductions, cross-media impacts, and any other factors relevant to the decision-making. Using this information in conjunction with financial data for the industry, EPA then identifies the best available treatment technology that is economically achievable and sets effluent limitations based on the performance of that technology. (Note: The effluent guidelines do not require facilities to

install the particular treatment technology identified by EPA; however, the regulations do require facilities to achieve the effluent quality attained by the model technology used to calculate the effluent limits guidelines.)

To address variations inherent in certain industries, effluent guidelines may be promulgated for groups of facilities (i.e., subcategories) based on their fundamental differences in manufacturing processes, products, water use, or wastewater pollutant loadings. EPA has issued national technology-based effluent guidelines for over 50 industries. One of these industry categories is the Feedlots Point Source Category, and its effluent guidelines limitations are listed in Title 40 of the U.S. Code of Federal Regulations, part 412 (40 CFR Part 412).

What Are The Effluent Limitations Guidelines That Apply To Animal Feeding Operations?

The effluent limitations guidelines for the Feedlots Point Source Category are codified at Title 40, Part 412 of the U.S. code of Federal Regulations (40 CFR § 412). The category has two subparts:

- Subpart A — applies to feedlots with at least:
 - 1,000 slaughter steers and heifers;
 - 700 mature dairy cattle;
 - 2,500 swine weighing over 55 pounds;
 - 10,000 sheep;
 - 55,000 turkeys;
 - 100,000 laying hens or broilers when facility has unlimited continuous flow watering systems;
 - 30,000 laying hens or broilers when facility has liquid manure handling system;
 - 500 horses; or
 - 1,000 animal units from a combination of slaughter steers and heifers, mature dairy cattle, swine over 55 pounds, and sheep.
- Subpart B — applies only to feedlots confining 5,000 or more ducks.

The effluent limitations for Subpart A prohibit the discharge of process wastewater pollutants to waters of the United States, except when chronic or catastrophic rainfall events cause an overflow from a facility designed, constructed, and operated to contain all process-generated wastewater plus the runoff from a 25-year, 24-hour rainfall event. Animal wastes and other water that must be controlled include:

- spillage or overflow from:
 - animal or poultry watering systems;
 - washing, cleaning, or flushing pens, barns, manure pits, or other feedlot facilities;
 - direct contact swimming, washing, or spray cooling of animals; and
 - dust control
- precipitation (rain or snow) which comes into contact with any manure, litter, or bedding; or
- any other raw material or intermediate or final material or product used in or resulting

from the production of animals or poultry or direct products (e.g., milk or eggs).¹

Clarification/Questions about NPDES and ELG

One stakeholder asked about the relationship between the NPDES CAFO regulation and the NPDES agriculture exemption. Will Hall explained that, since CAFOs are specifically defined as point sources, they are not eligible for the exemption². The stakeholder referred to legal challenges to the Clean Water Action Plan and the expansion of EPA's promulgation authority. Chuck Sutfin explained that the rules that are being revised were promulgated in the 1970s.

One stakeholder asked whether the revisions will have to be approved by Congress. Tom Kelly explained that under the law, the Agency must submit virtually all final regulations, including the CAFO regulation revisions, to Congress for review and potential disapproval. In the case of "major" regulations (in general, those that have an annual effect on the economy of \$100 million or more), the law gives Congress a period of time to disapprove the regulations before they take effect. [Editor's Note: To disapprove a set of regulations, a joint resolution of disapproval must be enacted like any other law – i.e., it must be passed by both Houses of Congress and presented to the President, and in the case of a Presidential veto, passed by a two-thirds vote of both Houses.]

He also indicated that it is uncertain at present whether this rule will be major. Ron Jordan remarked that the estimates of total costs will probably not be available before the SBAR Panel convenes, but will be available shortly thereafter. EPA plans to provide information on the methodology for estimating total costs of the revisions before the Panel convenes.

Mr. Glover of SBA asked that the stakeholders look at the cost estimate information as soon as EPA gets it to them. Mr. Glover told the stakeholders that their most valuable contribution will be in commenting on the cost information. He also indicated that Congress can choose to take action on the rule revisions without waiting for an estimate that the \$100 million threshold will be reached. Tom Kelly told the stakeholders that the aggregate cost information will be one of the last pieces of the cost estimate completed and therefore, it is necessary for them to start looking at incremental cost estimates as they are completed. He indicated that EPA sees the SBAR Panel as a formative process helping to establish the cost estimates.

One stakeholder expressed some concern that USDA/NRCS will assume a regulatory role under the possible revisions. EPA indicated that NRCS will continue in its current educational and outreach role and will not take on any regulatory responsibilities for enforcing the NPDES regulations under the CWA. EPA and the states will continue to enforce the NPDES regulations.

¹Disclaimer: This is only a general description of the regulations; one should consult the regulations themselves for the precise requirements

²Addendum: This statement is generally correct in terms of discharges from the feedlot area. Some discharges from land application areas qualify as discharges from the CAFO but are eligible for the exemption.

Sector-Specific Sessions

The three afternoon sector-specific conference calls were dedicated discussion with sector-specific stakeholders. The first sector-specific call was for representatives of the beef and dairy industry and also included a representative of the bison industry and a representative of the sheep industry. The second sector-specific conference call was for representatives of the swine industry and the third for representatives of the poultry industry. At the beginning of each call, Tom Kelly explained the agenda and that the meeting was intended for EPA to hear comments and not to defend or argue EPA positions. Shelley Fudge then gave a presentation on the NPDES CAFO rule revisions under consideration after which Ron Jordan presented the ELG revisions under consideration for Beef and Dairy and Jan Goodwin did likewise for Swine and Poultry. A brief period was given after each presentation for the stakeholders to ask questions of clarification, and then the floor was opened up for discussion.

NPDES Regulatory Revisions Under Consideration

Shelley Fudge's presentation on the NPDES CAFO regulatory revisions under consideration closely followed a document entitled "Information Regarding the Proposed Revisions to the NPDES Regulations for Concentrated Animal Feeding Operations," which was provided to the stakeholders one week prior to the meeting. This document, and Ms. Fudge's presentation, answered the three questions 1) "Who must apply for a permit?," "What is in the permit?," and "What type of permit do you get?" and discussed the regulatory changes being considered relative to each of these questions. Ms. Fudge also discussed other revisions under consideration that were not included in the document outlined.

Who Must Apply for a Permit?

In addressing who must apply for a permit, Ms. Fudge indicated that EPA is considering the following regulatory changes, among possible others.

1. Should EPA change the definition of "animal unit"? EPA is considering deleting the term animal unit (AU) from the CAFO definition and replacing it with a specific number of animals for each type. This change is being considered to increase clarity because of differences between agencies in defining an animal unit and the purpose that such a unit serves.

2. Should immature animals be considered in determining the total number of animals? EPA is considering including the number of immature animals for all animal types. Immature animals are not currently considered for the dairy and swine sectors in determining whether an AFO meets the regulatory definition of a CAFO, although the permitting authority may always designate particular facilities with immature animals as CAFOs on a case-by-case basis. The inclusion of immature animals directly in the regulatory definition of a CAFO would more appropriately reflect the concentrated nature of each respective operation.

3. Should EPA change the current regulatory threshold for large CAFOs (currently defined as

1,000 or more animal units)? EPA is considering lowering the threshold for large operations above which all AFOs are defined as CAFOs. EPA is evaluating the current threshold of 1,000 animal units to determine whether it continues to capture operations that present the greatest risk to water quality and public health.

4. How should EPA determine whether animal feeding operations that fall below the current threshold of 1,000 or more animal units should be defined or designated as CAFOs? EPA is examining a number of alternatives to address those operations below the large, 1,000 AU AFO threshold that are likely to pose a significant risk to water quality and public health. Some of the options that EPA is considering are: a) modifying the criteria applicable to AFOs with 301–1,000 animal units, and/or b) modifying the criteria used to designate any size AFO as a CAFO. In addition, EPA is considering eliminating the 300–1,000 AU category and using the designation process exclusively for AFOs below the large CAFO threshold and modifying the designation criteria.

5. Should EPA change the current CAFO definition concerning poultry operations? EPA is considering revising the CAFO definition to include all poultry operations regardless of the watering or manure system used. The agency feels that this is an equity issue and that changes in practices generally used in the poultry industry may warrant this revision. The effect would be to bring more generally into regulation dry manure systems, which are used by more than 80 percent of the poultry industry (not including duck operations).

6. Should EPA remove the 25-year, 24-hour storm provision from the NPDES CAFO definition? Under the current regulations, an animal feeding operation is exempt from being defined as a CAFO if it discharges only in the event of a 25-year, 24-hour or larger storm. EPA is considering removing this exemption to ensure that CAFOs are subject to enforceable permit conditions, including monitoring and reporting requirements, and to better address the potential risks to water quality and public health posed by all facilities that otherwise meet the definition of a CAFO. Also, there is a similar requirement in the ELG that storage structures be designed and maintained to contain process wastewater plus the runoff from a 25-year, 24-hour storm event. EPA anticipates, though, that the ELG requirement would not be affected by a decision to remove the 25-year, 24-hour storm provision from the NPDES CAFO definition.

7. Should corporate entities that exercise substantial control over a CAFO be co-permitted? EPA is considering co-permitting corporate entities that meet certain criteria. Under this potential revision, corporate entities that exercise substantial operational control over a CAFO would be defined as “operators” of the CAFO for purposes of the NPDES program, and thus would be co-permitted along with the CAFO operator.

What is in the Permit?

In addressing what is in the permit, Ms. Fudge indicated that EPA is considering the following regulatory changes, among others, regarding what is in a permit for those operations that have been defined or designated to be CAFOs.

1. What aspects of the CAFO should be covered by the permit? EPA is considering clarifying the regulations to specifically state that CAFO permit coverage extends to discharges from land application areas (in certain instances — e.g., where there is over application of animal wastes to the land) as well as to discharges from the feedlot and manure storage areas and process wastewater discharges.

2. What requirements should be included in the permit to control discharges of pollutants from manure to waters of the U.S.? EPA is considering requiring development and implementation of comprehensive nutrient management plans (CNMPs). This revision would reflect the belief that the most effective way for CAFOs to minimize risks to water quality and public health is to develop and implement technically sound, economically feasible, and site-specific CNMPs.

3. What monitoring, record keeping and reporting requirements should be included in the permit? EPA is currently considering the following potential revisions: require CAFO permittees to have CNMPs developed by certified planners; explicitly require CAFO permittees to provide information to off-site recipients of CAFO manure so that they can properly apply the manure; explicitly require CAFO permittees to keep records of inspections, monitoring and other activities related to the implementation of the CNMP; require CAFO permittees to conduct self-certifications and self-evaluations of CNMP implementation, and to maintain records of such evaluations on-site, and; require additional explicit information as part of an application or notice of intent (NOI).

What Type of Permit?

In addressing what type of permit a CAFO would get, Ms. Fudge indicated that EPA is considering the following regulatory changes.

1. Under what circumstances is a general or an individual NPDES permit appropriate for a CAFO? EPA is considering requiring individual permits for CAFOs that meet certain criteria and increasing the public involvement process in general permits for CAFOs.

Additional NPDES Revisions Under Consideration

Ms. Fudge presented the following possible regulatory revisions in addition to those outlined in the document.

1. Good Faith Incentive — EPA is considering a Good Faith Incentive to small animal feeding operations who are usually good environmental stewards. If such an AFO should happen to make a mistake that would normally result in CAFO designation, the permitting authority would first give it an opportunity to resolve the problem before designating them as CAFOs and causing them to be subject to permitting.

2. Exit Provision — EPA is considering a provision which would allow small operators who have been designated as a CAFO to exit the permitting program after five years of permit compliance.

[Editor's Note: This provision is also referenced in the *Unified Strategy for Animal Feeding Operations*.]

ELG Regulatory Revisions Under Consideration

Jan Goodwin and Ron Jordan made presentations on the ELG regulatory revisions under consideration closely following Section 5 (What Changes To The Effluent Guidelines Are Being Considered?) of a document entitled "Regarding Possible Revisions to the Effluent Guidelines Regulations for Beef, Dairy, Swine, and Poultry," which was provided to the stakeholders one week prior to the meeting.

Expand the Scope of the Effluent Guidelines to include Operations Smaller than 1,000 Animal Units.

The current effluent guidelines apply only to those feedlots with a capacity of 1,000 animal units or greater. Expanding the scope to include smaller operations will increase the total number of CAFOs covered by the ELG rule, but it would not necessarily increase the number of operations defined as CAFOs. (The NPDES regulations at 40 CFR § 122 define which operations are CAFOs and thus subject to permitting. This change would just apply effluent guidelines requirements to some of the CAFOs that currently have their permit limits established by best professional judgement of the permitting authority. Increases in the number of operations actually defined as CAFOs would occur in reference to changes in the NPDES regulations.)

Depending on how far the applicability threshold would be lowered, it is possible that beef and swine feedlot small entities could be affected since small entities for the beef subcategory (on average) have a capacity smaller than 900–1,200 head and swine small entities have a capacity smaller than 1,500–2,100 head. It is unlikely that revisions to effluent guidelines would affect small dairies since the threshold would have to drop from the current limit of 700 mature dairy cattle down to 200 mature dairy cattle before affecting small entities. The lower threshold may also impact small poultry operations.

Clarify the Scope of the Effluent Guidelines as they Apply to Laying Hen and Broiler Operations Employing Dry Manure Handling.

The current effluent guidelines generally apply to laying hens or broiler operations employing continuous flow watering systems or liquid manure systems. Clarifying the scope to definitively include dry poultry operations could increase the total number of CAFOs covered by the ELG requirements but again, it is the related changes in the NPDES rule that would actually increase the number of AFOs subject to permitting. Depending on where the applicability threshold would be set, it is possible that small entities could be affected for the laying hen subcategory which have a capacity smaller than 110,000 birds. It is unlikely that revisions to effluent guidelines would affect small business broiler operations since the threshold would have to be set below 48,000–53,000 birds.

Establish Numeric Discharge Limitations or Zero Discharge Requirements for

Discharges from CAFOs Smaller than 1,000 Animal Units.

If the applicability of the effluent guidelines is expanded to include smaller operations, EPA will have to evaluate the technological feasibility and economic achievability of potential effluent guidelines for the newly covered facilities. EPA anticipates that affordability may be a significant concern if the rule is expanded to include smaller facilities. Since runoff controls (e.g., runoff ponds and lagoons) are significant contributors to the total cost of any new controls, alternative requirements to lessen the financial burden are being investigated. Examples of alternative technologies being reviewed include composting and deep stacking, trickling filters, fluidized bed reactors, sequencing batch reactors, and constructed wetlands.

Include Requirements that Apply to Land Application of Manure and Other CAFO Wastewaters, Including Developing and Implementing Nutrient Management Plans.

The current effluent guidelines do not cover discharges from land applications of manure. Land application is typically an integral part of the CAFO waste management system, and over-applying manure often results in a discharge of nutrient-rich field runoff to surface waters. Some states have established good programs for managing land applications of animal wastes; however, others lack the resources needed to implement an adequate level of control on an individual basis. In addition, USDA is developing guidance for developing comprehensive nutrient management plans (CNMPs) on a voluntary basis. However, the USDA CNMPs would not be imposed on facilities as a regulatory requirement.

EPA is considering including nutrient management requirements as part of the effluent guidelines, to ensure that operations included in the regulatory program have CNMPs as part of their NPDES permit. It is envisioned that, if included as part of the effluent guidelines, nutrient management would be required for all operations covered by the effluent guidelines. However, it is possible that an alternative set of nutrient management requirements could be established for smaller entities. Examples of the types of nutrient management requirements being considered include developing nutrient management plans; periodically analyzing the nutrient content of soil and manure samples; limiting manure applications to agronomic rates; and maintaining records of manure (and wastewater) applications and offsite transfers of manure.

Include Requirements for CAFOs to Implement Best Management Practices at Feedlot and Manure Storage Areas to Improve Control of Contaminated Runoff and Improve the Structural Integrity of Waste Storage Structures.

Structural and operational practices being considered include constructed diversions (diking, curbing, grading, or other means) to collect contaminated runoff from (and divert clean stormwater away from) areas where animals are confined or where manure or raw materials are stored (to the extent practicable); permanently-installed depth markers for ponds, lagoons, tanks, and other containment structures for runoff and liquid animal wastes; alternatives to burial of routine poultry mortality; and regular visual inspections of runoff controls and containment structures.

Include the Number of Immature Animals in the Total Animal Count when Determining Whether the Effluent Guidelines Apply (relevant for dairy and swine; irrelevant for beef feedlots and poultry). [Any such change would likely be made in tandem with similar changes to the NPDES permit regulations codified at 40 CFR Part 122.]

The current effluent guidelines count only mature dairy cattle, and exclude the number of calves and heifers, when determining applicability. Only swine over 55 pounds are counted when determining applicability for swine facilities. In contrast, all slaughter steers and heifers are counted when determining whether effluent guidelines apply to beef feedlots, and all ages of chickens and turkeys are covered by the current effluent guidelines. Excluding immature animals currently results in excluding significant sources of pollution from animal confinement situations when determining applicability (once it is determined that effluent guidelines apply to a feedlot, all wastes from feedlot areas, including manure from immature animals, is covered by the effluent guidelines). Therefore, EPA is evaluating whether the number of immature animals should also be counted when determining whether the effluent guidelines apply to dairies and swine. By revising the effluent guidelines to account for all confined animals, the rule's applicability would be more closely tied to a facility's total manure production rate.

- Swine — Production at swine facilities includes breeding, farrowing, weaning, and grow-finishing phases. Most swine production facilities are farrow-to-finish or grow-finish farms, but some facilities may be farrow-wean, farrow-feeder, wean-finish, or nurseries only. EPA's intent would be to establish a threshold that applies to stand-alone farrowing and nursery operations which confine large numbers of immature pigs. It is difficult to clearly identify how many swine operations would be affected by including immature animals within the applicability definition, but EPA estimates such facilities comprise a small percentage of the total swine facilities. The number of small entities affected by this change would depend primarily on the applicability threshold.
- Dairies — Dairies are less likely than swine facilities to keep immature animals in total confinement until the animals reach maturity. Some dairies keep no heifers or calves onsite, while at others the numbers of heifers and calves equals to number of mature cows. Also, some dairies with calves and heifers keep them confined in drylots or barns, while many others keep immature animals in pastures. Further complicating the matter, the industry and many permitting authorities typically measure the size of an operation by the size of the milking herd, rather than the total number of mature and immature animals. As a general matter, the size of the milking herd at a particular dairy is a fairly constant value, while the number of calves and heifers kept on site may be allowed to vary depending on business conditions. As a result, it is difficult to clearly identify how many operations would be affected by including immature animals within the applicability definition. It is also unclear whether such a change would enhance implementation of the effluent guidelines.

Questions, Comments and Responses for Beef and Dairy Presentation

After Shelly Fudge's presentation, Mr. Glover of the SBA asked what cost savings over applying for a permit would be realized by a small operator who voluntarily develops a CNMP? EPA indicated that the development of those data is in the preliminary stages and the cost range for CNMP development could be anywhere from \$2,000 to \$15,000. EPA also added that small operators may be eligible for assistance to develop CNMPs and could thereby avoid permitting costs. Mr. Glover expressed concern that the stakeholders would not have access to the cost estimates in time to prepare comments for the SBAR Panel.

A stakeholder asked about the difference in animal unit thresholds for who should be permitted in coastal management zones. Shelley Fudge indicated that EPA is considering giving thresholds in terms of numbers of animals, including immature animals and that the differentiation between the NPDES CAFO regulation and other regulations would not change.

The stakeholder asked how EPA intends to change the counting of immature animals. Ms. Fudge stated that EPA is soliciting comments regarding this change and is as yet undecided about how to count immature animals. She indicated that this decision is likely to have an impact on smaller facilities because they tend to have immature and mature animals on the facility.

A stakeholder asked if EPA intends to regulate nutrient management according to phosphorus. Jan Goodwin stated that EPA anticipates deferring to USDA and State permitting authorities to determine if phosphorus is a problem. If so, EPA's revised regulations would address phosphorus nutrient management.

One stakeholder asked how imposing this regulatory burden on NRCS will not reinvent their relationship with the farmers. He stated that NRCS does not believe that they will not be asked to regulate to some extent; farmers are concerned with the changes in their relationships. He pointed out that NRCS will be assisting in preparation of CNMPs or best management plans. EPA will require the permitting on which NRCS will be advising. As discussed about implementation, this will change NRCS's responsibility. It will also change the farmers' relationship with what has been a trusted agency, which is currently a very positive relationship with the rural population. Jim Laity of OMB made a point of clarification, indicating that USDA will have a role in technical assistance which will be expanded, but there will not be a change in the nature of their role; USDA will not have any more of a role of regulatory oversight. To the extent that there is a regulatory program it will come out of EPA.

One stakeholder pointed to a parallel to trash management in that if landfills do not take the trash it will get dumped on the roads. If EPA makes it so stringent for the people who take the manure, they will quit taking it; they will go to commercial fertilizer to avoid the liability and then what will the farmers do with their manure? Another stakeholder asked why EPA does not regulate commercial fertilizer just like manure.

One stakeholder pointed out that he has attended lots of USDA extension meetings and

that the reduction in staff and resources means they are telling farmers they can not help to do these plans. He is not sure how they are going to do these plans without some help from the USDA.

One stakeholder pointed out that smaller yards put out smaller cattle as they cannot compete with the big yards for slaughter contracts. Their cattle are not fattened so are not the same weight as the larger yards. You are trying to lower threshold to 500 heads, the weight of these head will vary depending on the type of feed operation and to what extent they fatten their animals. Ron Jorden replied that EPA was not fixed on 500, but also that EPA needs to make assumptions and has. Jim Laity of OMB pointed out that this is a good example of why we want your comments — if 500 cows are not mature and grown out then EPA needs to know that this assumption does not apply. EPA may adjust their analysis on just these kinds of comments.

One stakeholder said EPA should not look at revenues but should look at profit. Some of these small operations are losing money on both crops and animals; they are milking their equity. EPA's response was that SBA defines who is a small business on revenues; but under the CWA, EPA looks at the cost of those changes and the impacts on an operation not just revenues, to see if these new regulations are affordable, so small business comments are directly applicable.

One stakeholder pointed out that overall ecosystem management should have implications in this regulatory process. He pointed out the changes in the ecosystem with subdivisions coming out to farming. The issue is not just TMDLs in a particular water body, but is based on a much wider set of issues. He stated that he would be interested in criteria for impact. Jim Laity (OMB) addressed the comment, pointing out that one of the areas that the SBAR Panel are to review is how these particular rules interact with other federal rules and if the overlaps or conflicts make it harder to comply we are obliged to consider. The federal policy makers also may consider overlaps or conflicts with state or local laws — land use planning laws as an example. Mr. Laity asked the stakeholder to present the comment in writing.

One stakeholder pointed out that water control officials use their meadows for flood control. If he spreads manure and then someone else make a decision to open flood gates how can his impacts be controlled or blamed on him? Another stakeholder agreed, pointing to the need for the 25-year 24-hour storm exemption. Another stakeholder from Oregon indicated that he has a 100 year flood twice in 13 years and needs the 25-year 24-hour storm exemption. EPA indicated that, under current plans, it will not go away with regard to the Effluent Limitation Guideline, but that the provision within permits has been a circular argument and should be eliminated. EPA pointed out that if farmers have a natural failure that a permit actually may protect them from liability if they breach under a permit. If, on the other hand, they have no permit they are in violation.

One stakeholder stated that containment of wastewater and manure is not the issue. The end user is the problem. He also asked who is going to help with the plans. He also agreed that farmers could move manure faster (i.e., not store so long on site) but when they are small it is harder to get the manure hauler.

One stakeholder pointed out that the consumption of food is strictly dependent on weight and that manure generation should be on weight also. He asked if EPA could come up with a per pound threshold, indicating that way you do not have to worry about the immature. Jim Laity of OMB asked would you routinely know the weight? The stakeholder responded that he would generally know the weight. Mr. Laity responded that if the rules went to this, they would have to document. Another stakeholder indicated that it would be easier to count heads. He indicated that dairy farmers know weight, but that the different animals do not weigh nearly the same.

One stakeholder asked if EPA was including co-operative. He questioned the liability back to the co-ops from small business. Smaller producers are concerned with receiving any liability as a member of a co-op. EPA pointed out that the regulations address corporations that substantially influence the operation. Mr. Perez (SBA) pointed out to EPA that the agency has defined substantial control as directing feed, medication, and other factors. One stakeholder pointed out that organic farmers will be pulled in with this language as the farmers are given very specific direction as to what to feed and how to medicate.

One stakeholder pointed out that co-permitting issues open the door for some murky questions about liability which could have a very negative impact on capital formulations.

One stakeholder pointed out that EPA stated that five percent would be regulated under strategy and asked how many under the potential revisions.

Jim Laity of OMB requested written comments to flesh out these ideas and assured the participants that their comments will be read carefully. Tom Kelly indicated EPA will need to receive their comments by October 1st.

Questions, Comments and Responses for Swine Presentation

One stakeholder indicated that most farmers are concerned with water protection and they do their record keeping and recording. He for example uses global positioning and technology to increase productivity. He pointed out that the assumption that large production operations are all larger polluters is not always true. Small operations (e.g., hobby farmers, other small operations) can be big problems.

One stakeholder agrees with what EPA is trying to do. He points out that all manure is used for fertilizer. He says that EPA and OMB needs to level the playing field. He wants to keep family farms in business but indicates that corporations have had the advantage.

One stakeholder points out that farmers in her area have problems with NRCS undersizing storage facilities. Jim Laity asked if NRCS was not giving adequate technical assistance. The stakeholder, who indicates that she is in the Chesapeake Bay watershed, says NRCS does not plan for wash water or rainwater. Therefore, they sometimes have to pump the storage facilities

before they should.

The same stakeholder questions whether EPA is familiar with the industry, indicating that the swine industry is seeing prices that they have not see since the 1930's and are struggling. She points out that most are keeping the records right now and that is not a problem. It is when EPA starts requiring farmers to put in a lot of BMPs that costs increase.

One stakeholder pointed out that it is important to have some type of provision for 25-year, 24-hour storm events. EPA stated that producers should not be excluded from the permitting process because they only have an episodic discharge. If the producers are large and threatening and only release during storm events then they should still be permitted. Furthermore, the producers have some general protections from liability under a permit that unpermitted facilities do not have.

One stakeholder worried that chronic events would increase their exemption for discharges. EPA indicated that this issue requires further discussion.

One stakeholder asked how the final list of SERs will be selected. Tom Kelly responded by explaining the procedure for the selection of SERs.

Questions, Comments and Responses for Poultry Presentation

One stakeholder asked why EPA was considering lowering the threshold below 1,000 AUs when regulators are not adequately addressing those above that threshold.

Another stakeholder was concerned that if he is under a contract relationship with a larger firm and must co-permit, then he would lose his designation as a small business.

Another stakeholder commented that they were putting in sprinkle systems for their lagoons and that they do not have wells or record keeping and were concerned how the regulations would it affect any operations already in place when the rule passed.

Several stakeholders pointed out that NRCS staff are having trouble understanding the regulations and are scared to give technical assistance regarding these issues. They were concerned that NRCS could become a regulatory entity. EPA made it clear that the effluent limitations and rulemakings are under EPA's jurisdiction.

One stakeholder pointed out that if EPA lowers the threshold then more operations will require permits. He asked that the threshold not be lowered to 301 because this was too low. EPA indicated that they have no intention of lowering the threshold to 300 animal units.

One stakeholder pointed out that Alabama has regulations that are equivalent to or stricter than EPA regulations, except in terms of numbers of animals. Auburn University research, on which the Alabama regulations are based, equates 1,000 AUs to 125,000 broilers, based on litter

nutrient content. He asked how EPA came up with animal unit equivalents. EPA indicated they have been working with Ronnie Murphy in Alabama. EPA pointed out that using phosphorus content standards as criteria for other animals would be unmanageable. One stakeholder indicated that they used 100,000 bird as the threshold in Mississippi.

The stakeholder from Mississippi indicated that the real issue is co-permitting. He pointed out that they are independent. He indicated that the co-permits would allow the integrators to terminate a grower, offering an excuse to integrators. He said that he would not want to co-permit but would rather work with NRCS. Jim Laity (OMB) asked why an integrator could not just terminate a grower now. The stakeholder responded that this would give the integrator total control over the grower. Laity said he has read that some small growers would rather have the integrators co-permit to make them share the regulatory costs. The stakeholder disagreed and believes that others in Mississippi would agree with him. He believes that the applicator of the manure should bear the liability and responsibility for the litter. He points out that the bird never belongs to the operator just the housing and management—the integrator owns the bird and the refuse. Tom Kelly asked how a contract grower could afford it if the integrator did not co-permit and pick up the bill.

One stakeholder stated a concern that EPA is interceding in a two-party contractual agreement and asked if EPA has looked into the effect on that agreement. Another stakeholder indicated that there are IRS implications; and that he does not want to become an employee to the integrator.

Another stakeholder stated that he was in the first County to require CNMPs. He asked who would regulate this rulemaking and what would it cost. EPA responded that in his case, since Virginia is authorized, the State would regulate. EPA asked what it cost to prepare the CNMP. The stakeholder responded that it was extremely expensive to put up a new litter storage facility but that the plan was done with USDA's help and was only \$50 or so.

One stakeholder asked specifically about the possibility that a liquid system would be regulated the same as dry.

Another stakeholder asked if there was an aggregate evaluation for CAFO operations in a geographic area. EPA indicated that it is something we could consider, and would appreciate comments on how to structure such an approach.

One stakeholder stated that many States already have these regulations and asked if this really is generating any new benefits. He asked whether there are any studies indicating that AFOs are causing problems. EPA responded indicating that the Clean Water Action Plan identified nutrients as a problem, thus the Agency is addressing it. EPA indicated that they have attempted to survey states to find out how they are addressing nutrients; however, EPA also encouraged stakeholders to provide written input.

The stakeholder from Mississippi indicated that state's water quality has continued to

improve since 1973; indicating that those in Mississippi would like to identify the problem and then attack the problem with site specific controls. A stakeholder asked, assuming there are going to be regulations, does EPA need to regulate the entire industry or can EPA address those that are not operating in an appropriate manner? EPA indicated that they believe that in general the smallest operations would probably not routinely be covered by the regulations, although on a case-by-case basis the permitting authority can bring any small operation within the regulations where the small operation is a significant contributor of pollution.

Attachment A:

AGENDA

September 17, 1999

**Small Business Consultation Teleconference
CAFO NPDES and FEEDLOT ELG RULES**

GOAL

- To present and clarify information on potential regulatory revisions
- To request oral or written comments (by October 1, 1999)

Preliminaries

- Speakers are asked to identify themselves and their sector when speaking
- Note change in afternoon telephone number, due to Emergency Hurricane preparations (202) 260-7280, access code 4613#
- Note procedure if having trouble getting connected: call (202) 260-2663 or (202) 260-7280 and ask operator to call you back, and to connect you to the “Office of Water CAFO call scheduled by Karen Metchis”

10:30–10:45 Operator connects participants

10:45–11:00 Introductions and Welcome Tom Kelly

11:00–12:30 Background and Overview based on Mailing #1

Orientation to SBREFA process	Tom Kelly
Current NPDES Regulation	Chuck Sutfin
Current ELG Regulation	Sheila Frace
Relationship between NPDES and ELG	Sheila Frace
Q/A	

Break

12:55–1:05 Operator connects participants

The following presentations are based on Mailing #2

1:05–3:00

Beef and Dairy Combined

Explain Agenda

Tom Kelly

20 minute NPDES

Shelley Fudge

10 minute Q/A for clarification

20 minute ELG

Ron Jordan

10 minute Q/A for clarification

60 minutes discussion

Tom Kelly

Break

3:25–3:35

Operator Connects Participants

3:35–4:30

Swine

Explain Agenda

Tom Kelly

15 minutes NPDES

Shelley Fudge

10 minute ELG

Jan Goodwin

10 minute Q/A for clarification

25 minutes discussion

Tom Kelly

4:25–4:35

Operator Connects Participants

4:35–6:00

Poultry

Explain Agenda

Tom Kelly

20 minutes NPDES

Shelley Fudge

10 minute Q/A for clarification

20 minute ELG

Jan Goodwin

10 minute Q/A for clarification

30 minutes discussion

Tom Kelly

**APPENDIX C:
WRITTEN COMMENTS RESPONDING TO THE SEPTEMBER 17, 1999 SMALL
BUSINESS CONSULTATION CONFERENCE CALL ON CONCENTRATED ANIMAL
FEEDING OPERATIONS PERMIT RULE AND EFFLUENT LIMITATION GUIDELINES
REVISIONS**

**APPENDIX D:
LIST OF ITEMS DISTRIBUTED TO
SMALL ENTITY REPRESENTATIVES FOR THE
JANUARY 5, 2000 AND JANUARY 11, 2000
CONFERENCE CALLS**

All documents that were sent to Small Entity Representatives are listed below:

- 1) Outreach Package 3, contents included;
 - Letter from Tom Kelly, Small Business Advocacy Chair
 - Attachment 1: List of Panel Members and Small Entity Representatives
 - Attachment 2: Information for Meeting with the Small Business Advocacy Review Panel
 - Attachment 3: SER Outreach Document from the Small Advocacy Review Panel on the U.S. EPA's Proposed Regulatory Changes to the NPDES and ELGs for CAFOs
 - Attachment 4: Regulatory Flexibility Alternatives
 - Attachment 5: Executive Summary
 - Tab 1: Overview of the Methodology for Estimating the Cost of Revising the Effluent Guidelines for Swine and Poultry
 - Tab 2: Overview of the Methodology for Estimating the Cost of Revising the Effluent Guidelines for Beef and Dairy Animal Feeding Operations
 - Tab 3: Cost Annualization Approach
 - Attachment 6: Questions for SERs
 - DELIVERY DATE: December 28, 1999

- 2) "Attachment 5 — Tab 2" Replacement Document (Information requested by the SBAR Panel during the January 5, 2000 conference call)
 - DELIVERY DATES: January 7, 2000 and January 10, 2000

**APPENDIX E:
COMBINED SUMMARY OF SMALL ENTITY REPRESENTATIVE
CONFERENCE CALLS ON THE NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM (NPDES) AND EFFLUENT LIMITATION GUIDELINE (ELG)
REGULATIONS FOR
CONCENTRATED ANIMAL FEEDING OPERATIONS:
JANUARY 5, 2000 AND JANUARY 11, 2000**

The Small Business Advocacy Review Panel (SBAR Panel or Panel) convened two conference calls/meetings with a group of Small Entity Representatives (SERs) to solicit feedback regarding EPA's revisions to the National Pollutant Discharge Elimination Systems (NPDES) and Effluent Limitation Guideline (ELG) Regulations for Concentrated Animal Feeding Operations ("CAFO Rule"). The first conference call was held on Wednesday, January 5 from 10:00 a.m. to 5:30 p.m. (ET)(see Attachment A for meeting agenda). In order to give SERs from different livestock industries an opportunity to discuss sector-specific issues, the conference call was divided into three sectors: swine, poultry, and beef/dairy/exotics. Each sector was allotted two hours for discussion.

The second conference call was held on January 11, 2000 from 1:00 p.m. to 5:00 p.m. (ET) (see Attachment B for meeting agenda). The purpose of this event was to provide SERs with additional time to discuss issues and ask questions regarding the CAFO Rule. This conference call followed the same format as the first one. SERs were allotted approximately an hour per sector to discuss issues and ask questions.

EPA's goals for revising the CAFO Rule are:

- to update the current regulations to reflect current industry characteristics and practices,
- to make the current regulations simpler and easier to understand, and
- to ensure that all CAFOs that need to have permits are permitted.

EPA is scheduled to propose the CAFO Rule by December 2000 and to promulgate the final rule two years later. The purpose of these conference calls/meetings is to help EPA carry out its responsibilities under the Regulatory Flexibility Act to gather the recommendations of SERs on the proposed rule options and alternatives EPA is considering. This group of SERs will provide comments to the SBAR Panel (composed of EPA, the Small Business Administration, and the Office of Management and Budget) which, in turn, will draft a report providing recommendations to EPA on the CAFO Rule.

The meeting participants for the January 5, 2000 conference call were:

EPA Office of Policy

Tom Kelly	Small Business Advocacy Chair
Jennifer Vernon	SBAC Staff Lead
Tom Knuckle	Small Business Ombudsman Staff

EPA Office of Water, Office of Wastewater Management (OWM)

Charles (Chuck) Sutfin	Director, Permits Division
Gail Cooper	Chief, Rural Branch
Charlotte White	CAFO SBREFA Lead
Karen Metchis	NPDES Rule Lead
William Hall	AFO Staff
Louis By	AFO Staff

EPA Office of Water, Office of Science and Technology (OST)

Sheila Frace	Director, Engineering and Analysis Division
Donald Anderson	Chief, Commodities Branch
Janet Goodwin	ELG Rule Lead
Ron Jordan	Economist: Beef & Dairy
Renee Johnson	Economist
Paul Shriner	Economist: Swine & Poultry

Small Business Administration (SBA)

Jeer Glover	Chief Counsel for Advocacy
Austin Perez	

Office of Management and Budget (OMB)

Jim Laity

EPA Office of General Council (OGC)

Paul Bangser

Small Entity Representatives (SERs)

<u>Sector</u>	<u>Region (State)</u>
---------------	-----------------------

Swine

Chris Peterson	Midwest (Iowa)
Donna Reifschneider	Midwest (Illinois)
Paul Willis	Midwest (Iowa)

Beef

John Pemberton	National Cattlemen's Beef Association
Reg Clause	Midwest (Iowa)

Galen Frenzen Midwest (Nebraska)
Terry Handke Central (Kansas)
Sue Jarrett Central (Colorado)

Dairy

Carissa Itle National Milk Producers Federation
Norman Jordan South (North Carolina)
Scott Mason Mid-Atlantic (New Hampshire)
Allen Voortman Pacific (Washington)

Poultry (includes broilers, layers, and turkeys)

Judy Morrison National Contract Poultry Growers Association

Broilers

V.O. Campbell South (Mississippi)
James Anderson South (Arkansas)
Gerald Johnson South (Arkansas)

Layers

Randy Johnson South (Georgia)
George Ulmer South (South Carolina)

Turkeys

none present

Other Sectors

Sheep

none present

Bison

none present

Multi-Sector Representatives

Nancy Danielson National Farmers' Union
Tom VanArsdall National Council of Farmers' Cooperatives
Katherine Ozer National Family Farmers' Coalition
Don Parrish American Farm Bureau Federation

Other Meeting Attendees

EPA Office Enforcement and Compliance Assurance (OECA)

Atal Eralp
Al Havinga
Nadine Steinberg

EPA's Contractor Support
SAIC contractors

The meeting participants for the January 11, 2000 conference call were:

EPA Office of Policy

Tom Kelly	Small Business Advocacy Chair
Jennifer Vernon	SBAC Staff Lead
Stuart Miles-McLean	SBAC Staff
Patrick Easter	SBAC Staff
Tom Nakley	Small Business Ombudsman Staff

EPA Office of Water, Office of Wastewater Management (OWM)

Charles (Chuck) Sutfin	Director, Permits Division
Karen Metchis	NPDES Rule Lead
William Hall	AFO Staff
Louis Eby	AFO Staff

EPA Office of Water, Office of Science and Technology (OST)

Sheila Frace	Director, Engineering and Analysis Division
Donald Anderson	Chief, Commodities Branch
Janet Goodwin	ELG Rule Lead
Ron Jordan	Economist: Beef & Dairy
Renee Johnson	Economist
Paul Shriner	Economist: Pig & Poultry

Small Business Administration (SBA)

Jere Glover	Chief Counsel for Advocacy
-------------	----------------------------

Office of Management and Budget (OMB)

Jim Laity

EPA Office of General Council (OGC)

Paul Bangser

Small Entity Representatives (SERs)

<u>Sector</u>	<u>Region (State)</u>
---------------	-----------------------

Swine

Deb Atwood	National Pork Producers Council
Jay Foushee	South (North Carolina)
Chris Peterson	Midwest (Iowa)
Donna Reifschneider	Midwest (Illinois)
Paul Willis	Midwest (Iowa)

Beef

John Pemberton	National Cattlemen's Beef Association
Reg Clause	Midwest (Iowa)
Galen Frenzen	Midwest (Nebraska)
Terry Handke	Central (Kansas)
Sue Jarrett	Central (Colorado)

Dairy

Carissa Itle	National Milk Producers Federation
Scott Mason	Mid-Atlantic (New Hampshire)
Bruce Roos	Pacific (Oregon)

Poultry (includes broilers, layers, and turkeys)

Broilers

V.O. Campbell	South (Mississippi)
James Anderson	South (Arkansas)

Layers

Randy Johnson	South (Georgia)
George Ulmer	South (South Carolina)

Turkeys

Craig Miller	Mid-Atlantic (Virginia)
--------------	-------------------------

Other Sectors

Sheep

Pat O'Toole	Midwest (Wyoming)
-------------	-------------------

Multi-Sector Representatives

Don Parrish	American Farm Bureau Federation
-------------	---------------------------------

Other Meeting Attendees

EPA Office of Enforcement and Compliance Assurance (OECA)

Nadine Steinberg

United States Department of Agriculture

Richard Hegg
Richard Reynnells

EPA's Contractor Support

SAIC contractors

Overview of the Conference Calls

The January 5, 2000 conference call was convened to discuss the proposed regulatory revisions and potential small business flexibility concepts with SERs. In addition, the January 11, 2000 conference call was convened to provide SERs an opportunity for additional discussion of these issues.

I Introduction and Opening Remarks

1. January 5, 2000 Conference Call

Mr. Tom Kelly, Chair, opened the meeting by mentioning that the purpose of this conference call is to discuss the likely impacts of regulatory options on small business. He provided SERs with a brief overview of the Small Business Regulatory Enforcement Fairness Act (SBREFA). SBREFA was enacted by Congress to ensure that small entities have an opportunity to participate in the regulatory development process and that their interests are carefully considered. The President signed SBREFA into law in 1996 as an amendment to the 1980 Regulatory Flexibility Act (RFA). The RFA requires agencies to take steps to collect input from small entities (e.g., small businesses, small governments, and small nonprofit organizations) on regulations and assures that small entities have been given an opportunity to participate in the rulemaking process for any rule which will have a significant economic impact on a substantial number of small entities.

Mr. Kelly then officially introduced himself as the chair of the four-member SBAR Panel, which consists of representatives from EPA, the Office of Management and Budget (OMB), and the Small Business Administration (SBA). He informed SERs that this Panel prepares a report for the public record that details, among other things, the advice and recommendations it collects from SERs and opportunities which it sees for addressing small entity interests within the rule. The Agency then considers the Panel's report as it develops the rule, makes any appropriate adjustments to the rule, and publishes the proposed rule with the Panel report as part of the record.

Mr. Kelly indicated that in order to complete the SBREFA process in 60 days, which started when the Panel officially convened on December 16, 1999, it was necessary to reduce the number of individuals participating in the process. Therefore, not all of the original 54 SERs are still involved in the SBREFA process. The Panel only selected 34 individuals to participate as SERs. He indicated that the Panel selected "what they hope is a representative sample."

Mr. Kelly informed SERs that they can submit written comments by January 14th 2000. He told SERs that after today's session they should have a better indication about which issues to include in their comments.

Mr. Jere Glover, SBA, thanked SERs for taking time to participate in the process. He informed SERs that this particular panel is far behind where most panels have been at this point.

Mr. Glover mentioned that this is a 60-day process and given these time constraints, the Panel will work to get all remaining information to SERs as quickly as possible. Mr. Glover concluded by saying that as Chief Counsel, he is “concerned that this process is not as focused as previous panels.”

Mr. Jim Laity, OMB, also discussed the importance of the SBREFA process. He informed SERs that they have the ability to impact the final rule. Mr. Laity also disclosed that both SBA and OMB have varying perspectives on the proposed components of the CAFO Rule. As such, this conference call gives SERs the opportunity to assist SBA and OMB in understanding the important issues. Mr. Laity thanked the SERs for participating and encouraged them to provide as much information to the Panel as possible.

During the swine portion of the conference call, several SERs commented about the lack of sufficient time they were given to read and digest the information presented to them in the last outreach package. Mr. Don Parrish, American Farm Bureau Federation, inquired as to whether or not there was an official way to file a complaint. Mr. Kelly answered affirmatively and informed Mr. Parrish that he could address any correspondence directly to him. Mr. Parrish also inquired as to why December 16, 1999 was selected to begin the 60-day SBREFA process for the CAFO Rule. Mr. Kelly indicated that this was a date selected by him and mutually agreed upon by the other members of the Panel.

Mr. Tom VanArsdall, National Council of Farmers’ Cooperatives, expanded upon Mr. Parrish’s comment and asked how helpful the information gathered from this process will be if it is collected within such a tight and restrictive time frame. Mr. Kelly explained that the 60 days is actually a statutory requirement. He further explained that the Panel is only one of many important required functions that take place in the statute. Mr. Kelly also explained that the Panel wanted to conclude with this process prior to “option selection”, which is scheduled in March. Mr. Kelly concluded by informing SERs that the information presented in the outreach package is a refinement of information provided to them earlier.

Mr. Laity told SERs that the end date of this process is scheduled for December 2000. He continued by stating that this deadline was court mandated and is not changeable. Mr. Laity acknowledged that the 60-day time frame is a very ambitious one; however, he explained that many SERs have already submitted comments, and the Panel is not starting from ground-zero.

Ms. Donna Reifschneider indicated that she would like an extension to the comment deadline. Ms. Karen Metchis, OWM, indicated that there will be more opportunity for input because the proposal will be issued in December 2000 and will be finalized two years later.

2. January 11, 2000 Conference Call

Mr. Tom Kelly, Chair, opened the meeting by introducing himself as the Small Business Advocacy Chair and then identified the other members of the SBAR Panel. He proceeded by asking the SERs in the conference room and on the telephone to introduce themselves. Mr. Kelly then announced to SERs that the written comment deadline has been extended and will now end on January 21, 2000.

Given the time constraints, Mr. Kelly decided to forego other introductory conversations (i.e., SBREFA background and proposed components) and opted to immediately begin discussions.

II Background on the CAFO Rules

1. January 5, 2000 Conference Call

The Clean Water Act (CWA) requires permits for all point sources that discharge pollutants into waters of the United States. Under the CWA, CAFOs are explicitly defined as point sources. In the 1970's EPA developed the NPDES and ELG regulations for CAFOs.

The CAFO permitting structure divides facilities that are animal feeding operations into three tiers to determine which ones are “concentrated” animal feeding operations. The first component identifies large operations over 1,000 animal units (AUs) as CAFOs. These large operations are automatically subject to the ELG technology-based requirements. The second component identifies “middle-sized” operations, those ranging from 300–1,000 AUs, as CAFOs only if they meet certain conditions (i.e, discharging pollutants into navigable waters through a manmade ditch, flushing system, or other similar man-made device/conveyance; or pollutants are discharged directly into waters that originate outside of and pass over, across, or through the facility or come into direct contact with the confined animals). These operations are not currently subject to ELGs but would receive a permit based on the best professional judgement (BPJ) of the permit writer. The third component for permitting CAFOs defines the smaller operations, those less than 300 AUs, as CAFOs only if they are specifically designated by the permitting authority. Permits for these operations would include technology-based requirements that are developed using BPJ. In addition, all NPDES permits include effluent limitations developed to meet State water quality standards. Currently, there are 43 States that have been authorized by EPA to issue NPDES permits.

Almost thirty years following the promulgation of the NPDES and ELG regulations for CAFOs, it is EPA’s goal to address current water quality problems associated with CAFOs. EPA plans to achieve this goal by performing the following actions:

- Updating the current regulations to reflect experience and changes in the industry over the last 30 years. This may include the following:

- addressing increasing consolidation,
 - including dry poultry operations,
 - updating best management practices for ELGs,
 - incorporating nutrient management practices and comprehensive management nutrient management plans in permits,
 - examining other aspects of the industry that might present opportunities to prevent pollution (e.g., consider co-permitting),
 - addressing over-application of manure on crop land.
- Simplifying the regulations to further clarify who is a CAFO and thus subject to NPDES regulation. This may be done by:
 - making the development of the permit more efficient and less reliant on the permit writer's best professional judgement, and
 - clarifying what conditions define an operation as a CAFO in the middle category.
 - Ensuring that all CAFOs have permits by:
 - improving clarity,
 - increasing permitting efficiency,
 - removing the 25-year, 24-hour event exemption from NPDES permitting (but retaining the 25-year, 24-hour design standard for compliance within the effluent limitation guidelines),
 - considering immature animals in calculating the number of animals at an AFO, and
 - extending EPA's ability to designate in authorized States where necessary.
 - Emphasizing and promoting voluntary practices to prevent pollution.

EPA has developed three scenarios that describe possible ways to construct the revised rule. EPA is currently seeking the advice of SERs in deciding how these scenarios might work to meet the goal of preventing nutrients from impacting water quality.

- Scenario 1: The middle category of operations would be eliminated. In order to ensure that the largest operations that pose risk to water quality are covered, the ELG threshold would be lowered. Operations above this threshold would be considered CAFOs and therefore subject to the ELG. Operations below the threshold would not be defined as CAFOs unless they are designated on a case-by-case basis.
- Scenario 2: Maintain the current three-tiered structure. The 1,000 AU threshold and the 300 AU designation categories would remain unaltered. All operations in the 300–1,000 AU category would be defined as CAFOs. A one page “check-box” self-certification mechanism would be implemented. This mechanism would

enable each operation to self-certify to the permitting authority that it does not pose a significant risk and does not have the potential to discharge pollutants. Only those operations that are unable to self-certify would be required to apply for a permit. However, in the permit application, the applicant could demonstrate that they have no need to actually obtain a permit.

- Scenario 3: Maintain the current three-tiered structure. The 1,000 AU threshold and 300 AU designation categories remain unchanged. For the 300–1,000 AU category, however, the conditions or criteria under which an operation would have to apply for a permit would be potentially changed and made more specific. Potential conditions that broadly describe the situations EPA is concerned with may include:
 - storage;
 - location in an impaired watershed;
 - proximity to waters of the U.S.;
 - location in a “manure shed”;
 - greater than two AUs per acre;
 - past, present or potential discharge through natural or man-made conveyances;
 - past, present or potential discharge due to improper land application.

In addition to the three proposed scenarios, EPA is examining other potential revisions, which are:

- deciding what is to be included in the permit, and
- determining what type of permit should be issued.

Items that could possibly be included in the permit, for example, are monitoring, record-keeping and reporting requirements, information for off-site transfer, as well as flexible (site specific) comprehensive nutrient management plans (CNMPs) that have been developed by a certified planner. In terms of what type of permit should be issued, EPA expects that most permits will continue to be general; however, the concern with general permits is that there may not be the same level of public involvement and public notification as with individual permits. To address this concern, EPA could either alter general permit requirements by making the Notice of Intent submitted by the CAFO available to the public, or by stipulating criteria for which certain operations must be issued individual rather than general permits.

It is important to note to what extent the proposed revisions might potentially impact small entities. According to information EPA has obtained from USDA, there are approximately 361,000 AFOs in the United States. EPA has estimated that 350,000 of these operations are defined as a small business. The breakdown is as follows:

- Above 1,000 AU Category: Approximately 320 are considered small entities;

- Below 300 AU Category: The vast majority of operations have fewer than 300 AUs, estimated to be 321,000 operations, of which most if not all are small entities. In this category, historically few, if any, have been designated as CAFOs. As in existing regulation, any operation in this category could be designated if the permitting authority or EPA determines that a discharge took place. It is anticipated that the permit would incorporate BMPs using the BPJ of the permitting authority.
- 300–1,000 AU Category: Of the 27,000 operations in this category, EPA estimates that approximately 21,000 are small entities. It is difficult, however, to estimate how many of these operations would be subject to permitting.

Cost Methodology Overview

In order to estimate potential compliance costs of regulatory requirements at a national level, EPA has developed model facilities flexible enough to accommodate a wide range of production practices and regional variations. For example, the model includes information on land application, best management practices, animal type, and manure and waste generation. Information used to develop these model facilities was taken from industry trade groups, USDA, NASS reports, and Ag census data.

In addition to the above, EPA has also estimated costs from a variety of options which include costs to install, operate, and maintain specific practices and technologies. These options represent incremental costs that are beyond current practices and current State/federal programs. These costs are divided into one time fixed costs, annual costs, and non-annual recurring costs. Currently, the costs are divided into four groups which are as follows:

- nutrient management planning
- facility upgrades
- land application
- practices and technologies to reduce, concentrate, or accommodate nutrient excess.

B. January 11, 2000 Conference Call

Due to the shorter length of the conference call, and because it was covered in the previous conference call, background information was not presented.

III Discussion of Issues — Swine Sector

The following is a brief summary of the major issues raised during the swine portion of each conference call. The comments have been placed under headings, which describe the general topics of conversation.

1. January 5, 2000 Conference Call

Co-permitting

Mr. Paul Willis asked the Panel to clarify who is responsible for a permit — the grower or the integrator. Mr. Willis also stated that he assumed the grower would have to take some responsibility; however, he was uncertain at what level.

Mr. Jim Laity, OMB, commented that co-permitting will increase costs to the grower because they will have to account for liability. Mr. Chris Peterson told Panel members that the grower *is* carrying the cost. Mr. Peterson commented that the primary responsibility should rest on the integrator not on the grower.

Costs

Mr. Don Parrish, American Farm Bureau Federation, asked EPA how manure production costs were calculated. Mr. Parrish specifically referenced to Table 3 in Attachment 5, tab 1, page 12 of the December 28th outreach mailing for clarification. Mr. Jim Laity, OMB, defined the problem as such, “different people do different things which bring about different costs.” Mr. Laity asked EPA for a table that more clearly illustrates the costs incurred by owners/operators that use different options. Mr. Austin Perez, SBA, added to the request by stating that in addition to costs, he also wanted a sense of the weighted factors.

Mr. Jere Glover, SBA, announced that if the cost assumptions do not seem realistic, then the SERs must speak up because a great many of these assumptions were made from limited data points. He further remarked that if SERs know from personal experience what certain costs will be (e.g., the cost of a hydrologist), then they are to inform the Panel members either in written or verbal format.

Mr. Parrish also asked EPA how it calculated costs associated with regulatory options. Jan Goodwin, Office of Water, indicated that costs are focused on operations below 1,000 AUs because this is where EPA believes a majority of small entities will originate. While Mr. Parrish agreed, he questioned EPA’s ability to analyze the costs associated with these smaller operations. He wondered whether or not these smaller operations would bear more of the costs because they have fewer measures already in place.

CNMPs

Ms. Donna Reifschneider asked the Panel if a computer program could be used to develop a site-specific CNMP in lieu of using a certified crop advisor. Ms. Reifschneider added that a computer program, such as the one she used to develop her site-specific CNMP, was “much more effective and simpler.”

Definition of Discharge

Mr. Don Parrish, American Farm Bureau Federation, wanted EPA to provide all SERs with an official definition of the term “discharge.”

Definition of a Small Business

Ms. Donna Reifschneider indicated that she desired a better, clearer definition of a small business. Mr. Chris Peterson continued the conversation by asking if the definition of a small business was based upon gross income. Mr. Austin Perez, SBA, answered affirmatively. Mr. Peterson further remarked that the definition of a small business should be divided for contract growers and independents. Without this division, Mr. Peterson believes that EPA is creating a legal loophole for contracting operations. Ms. Karen Metchis, OWM, indicated that this issue was explained in the outreach mailings and summarized by explaining that because independent operators receive more money for their animals than do contract growers, a larger contractor facility would be considered a small business while the same size independent operation might not. Thus, as described in the mailing, EPA developed a method to translate the SBA revenue limits into AUs. Ms. Sheila Frace, OST, further clarified that the current regulations are not based on revenue, rather they are based on the number of AUs.

Mr. Tom Kelly, Chair, remarked that alternative definitions, such as this one, is allowed.

Ms. Metchis mentioned that in Attachment 3, page 18 of the December 28th outreach mailing, there is a table which shows the AU — dollar threshold equivalents. Mr. Jim Laity concluded the discussion by stating that using AUs instead of a dollar threshold “levels the playing field.”

Facility Closure

Mr. Jim Laity, OMB, further discussed the issue of facility closure. He stated that the CNMP must address this issue in order to prevent a permit from forcing a facility to close.

Mr. Paul Willis commented that bankruptcy may occur along with facility closure. He inquired as to whether indemnity funds would be available to protect against bankruptcy.

Ms. Katherine Ozer, National Family Farmers’ Coalition, stressed the importance of facility closure issues.

General and Individual Permits

Mr. Don Parrish, American Farm Bureau Federation, asked about the privacy issues involved with these types of permits. Mr. Jim Laity, OMB, remarked that requirements for confidential business information (CBI) does not allow certain kinds of information to be kept confidential (e.g., how much an operation discharges). (He noted, however, that if a comment contains CBI, SERs should send the comment directly to Karen Metchis.)

Immature Animals

Ms. Donna Reifschneider wanted to know if EPA has looked at different scenarios for different operations (i.e., farrowing, nursery, grow-to-finish). Because any operation could include all of these phases, she suggested looking at an average from between 10–55 pounds.

Monitoring

Mr. Paul Willis questioned who should be required to monitor for discharges – the CAFO owner/operator or an outside party. Mr. Willis also wanted to know whether or not the CAFO owner/operator needed to record discharges.

Threshold

Mr. Don Parrish, American Farm Bureau Federation, wanted to know which thresholds require permits through designation. Ms. Karen Metchis, Office of Water, indicated that an operation could be designated as a CAFO if it discharged, or is discharging, pollutants through, for example, a stream that runs through the facility or via a man-made conveyance. Mr. Jim Laity, OMB, offered additional clarification by adding that if an operation does not have a stream or a conveyance then it would not be designated as a CAFO. Ms. Metchis concluded by stating that she hopes the new regulations will bring clarity to the threshold issue.

Total Maximum Daily Loads

Mr. Don Parrish, American Farm Bureau Federation, asked the Panel whether or not CAFOs that are located in an impaired watershed will incur greater costs, and possibly even be shut down, if the technology-based limits being used by that operation are not sufficient to meet water quality-based standards. Mr. Jim Laity, OMB, remarked that this particular process is not concentrated on water quality-based limits, rather it is focused on technology-based limits. Mr. Laity further remarked that CAFOs in impaired watersheds could be subject to greater costs than those CAFOs that are not located in impaired watersheds. Mr. Jere Glover, SBA, stated that the cost requirements could be so much that they could be cost prohibitive for the CAFO owner/operator.

25-year, 24-hour Storm Event Exemption from Permitting

Mr. Austin Perez, SBA, expressed concern over EPA's proposed elimination of this particular provision from the NPDES CAFO definition. Ms. Sheila Frace, OST, stated that by eliminating the exemption, all facilities with greater than 1,000 AUs would in fact be required to apply for a permit. Ms. Frace further explained that by requiring all large operations to have a permit, the CAFO owners/operators would be protected against citizen suits.

2. January 11, 2000 Conference Call

Co-permitting

Mr. Paul Willis commented that the owners of the animals should share the same responsibility as the growers. Ms. Donna Reifschneider disagreed with Mr. Willis and remarked that "co-permitting is not a good idea because there are responsibilities when you take the pigs."

Mr. Jay Foushee commented that he is not in favor of co-permitting. Mr. Foushee further remarked that EPA can not regulate how integrators do business. He concluded by stating that some operations might be shut down as a result of strict compliance requirements by the integrator.

Mr. Jim Laity, OMB, asked SERs how the Panel should address the issue of co-permitting. He asked SERs for their advice on how EPA should structure the rule “to fix this issue.”

Mr. Chris Peterson stated that while he was in favor of co-permitting, the integrator has all of the power.

Revenues

Mr. Jere Glover, SBA, asked Mr. Chris Peterson what percentage of his revenues originated from his swine operation. Mr. Peterson answered 70 percent.

State Requirements

Mr. Jay Foushee asked EPA whether or not it has been looking at various State CAFO requirements. Ms. Sheila Frace, OST, answered affirmatively. Mr. Jim Laity, OMB, commented that if a State is already implementing what EPA is proposing, then nothing new will be done in the State. Mr. Laity further remarked that it is up to each State to determine whether or not to make the State requirements stricter than federal requirements.

25-year, 24-hour Storm Event Exemption from Permitting

Ms. Donna Reifschneider commented that this provision should be clearer and easier to understand.

IV Discussion of Issues — Beef, Dairy, Exotic Animals Sector

The following is a brief summary of the issues raised during the beef, dairy, and exotic animals portion of each conference call. The comments have been placed under headings, which describe the general topics of conversation.

1. January 5, 2000 Conference Call

Authority

Mr. Don Parrish, American Farm Bureau Federation, requested an explanation of EPA’s authority for permitting facilities to operate. Mr. Don Parrish also stated his view that discharges from land application of manure do not fall under the authority of the CWA permitting program because the law exempts “agricultural storm water” discharges. Mr. Paul Bangser, of the General Counsel’s office stated that, while EPA recognizes the importance of the agricultural storm water exemption, not all discharges from land application areas qualify for the exemption. In EPA’s view, as stated in the Strategy, storm water discharges from areas where CAFO wastes are inappropriately applied (e.g., overapplied) are not exempt. The regulatory options EPA is considering do take the agricultural storm water exemption into account.

Mr. Pat O’Toole stated that EPA is “setting itself up for a huge legal battle.”

Confusing Regulations

Mr. Del Hensel voiced concern about “local and federal regulations getting too confusing.” Mr. John Pemberton, National Cattlemen’s Beef Association agreed. He further stated that current regulations lack clarity, and the terms that have significant legal determination are vague.

Mr. Don Parrish, American Farm Bureau Federation, added that EPA’s analysis is weak and needs more clarity.

CNMPs

Mr. Galen Frenzen commented that CNMPs are another regulatory burden that small operations are facing. Mr. Frenzen also posed the rhetorical question as to why nutrient plans were not needed for commercial fertilizer.

Ms. Sue Jarrett added that CNMPs should only be required for large operations over 1,000 AUs. Ms. Jarrett stated that “washing” has created runoff problems and manure management problems for those in the swine industry. Ms. Jarrett said that because of these problems, swine operations with over 1,000 AUs should definitely be required to develop and implement CNMPs. Because of their solid manure plans, Ms. Jarrett suggested that beef operations with less than 2,500 AUs should not be required to develop and implement CNMPs.

Mr. Terry Handke stated that there “can’t be a one size fits all plan for CNMPs.” Mr. Jim Laity, OMB, commented that EPA is not saying that there should be a one size fits all plan for CNMPs. Mr. Laity indicated that EPA feels a plan needs to be developed by someone qualified to evaluate differences that may arise. He also added that because EPA does not currently know which operations need a permit, they are using AUs as a guide. Mr. Scott Mason indicated that rather than using AUs to determine whether or not a CNMP is necessary, use either AUs per acre or tons of manure per acre applied.

Mr. Mason also commented that he does not want someone off of the farm to develop the plan. Mr. William Hall, OWM, added that EPA wants the plan written by a certified individual. As long as the owner/operator is certified then he/she can write the plan themselves. Mr. Tom Kelly, Chair, mentioned the notion discussed earlier about the possibility of using a computer program to develop the CNMP.

Definition of Discharge

Mr. Don Parrish, American Farm Bureau Federation, wanted EPA to provide all SERs with an official definition of the terms “discharge” and “potential to discharge.”

Immature Animals

Mr. Allen Voortman indicated that it would be a nightmare to regulate immature animals because numerous dairies, for example, constantly “move animals back and forth.”

Individual Permits

Ms. Carissa Itle, National Milk Producers Federation, commented that individual permits

are too resource intensive.

Land Application

Ms. Carissa Itle, National Milk Producers Federation, commented that since most dairies land apply, this issue will undoubtedly impact them.

Location Issues

Mr. Allen Voortman inquired about the location issue (100 feet from U.S. waters). Mr. Voortman briefly discussed the five citizen suits that are currently ongoing in the State of Washington. He noted that a court ruled that irrigation canals are considered waters of the U.S. Mr. Chuck Sutfin, OWM, asked Mr. Voortman to include more information about this in his written comments.

Mr. Scott Mason indicated that the 100 foot buffer zone is a problem. Due to this buffer zone restriction, Mr. Mason would lose 10–15 percent tillage on his farm alone, which would be extremely costly for him.

Manure

Mr. Scott Mason commented that manure is a valuable product. Mr. Allen Voortman also stated that manure should be viewed as an asset rather than a liability.

Mr. John Pemberton, National Cattlemen's Beef Association, requested a benefit analysis of manure.

Number of Acres

Mr. Allen Voortman stated that EPA really needs to be looking at the number of acres instead of the number of AUs. Mr. Voortman further explained his point by asking how EPA would permit an operation, for example, with 850 cows on 18 acres.

Mr. Don Parrish, American Farm Bureau Federation, indicated that "2 AUs per acre" needs to be clarified.

Mr. Galen Frenzen stated that most small AFOs have sufficient cropland for spreading their manure. Ms. Carissa Itle, National Milk Producers Federation, also estimated that approximately 95 percent of small dairies have enough cropland for spreading their manure.

Permitting

Ms. Sue Jarrett commented that there is a definite need for permitting all operations greater than 1,000 AUs, especially in non-arid areas. Ms. Jarrett indicated that in her State many large operations discharge due to excessive land application. She suggested permitting the operations over 1,000 AUs first and then permitting the smaller operations under 1,000 AUs.

Mr. Galen Frenzen stated that he has a problem with permitting anything under 1,000 AUs.

Self-Monitoring

Ms. Sue Jarrett said that self-monitoring does not work and that there is a need for EPA and the States to do more inspections and enforcement. She also stated that we need to impose monitoring requirements in the rule.

Small Business Definitions

Ms. Carissa Itle, National Milk Producers Federation, commented that the small business definition is misleading and that there will be some dairies (under 300 AUs) that are affected through total maximum daily loads. Ms. Gail Cooper, OWM, commented that these regulations are not designed to change anything below 300 AUs for the dairy sector.

Threshold

Mr. Reg Clause indicated that 1,000 AUs is really not a large entity in terms of the economics; however, it is small enough in terms of what EPA wants to accomplish. He suggested not lowering the threshold. Mr. John Pemberton, National Beef Cattlemen's Association, agreed. During this discussion, Mr. Clause estimated that a feedlot with 1,000 AUs will gross approximately \$700,000–800,000 per turn of cattle, and will average two turns per year.

Mr. Pemberton also asked to see EPA's analysis of the environmental concerns of those operations 300–1,000 AUs in size.

Total Maximum Daily Loads

Mr. Reg Clause commented that there is no basis for site specificity when bringing in total maximum daily loads.

Turns of Cattle

Mr. John Pemberton, National Cattlemen's Beef Association, commented on the difficulty in modeling "turns of cattle" because of factors such as, corn prices, regional differences, and the size of the operation. Mr. Pemberton further remarked that these variable factors create a difficulty in making a simple linear determination. Mr. Pemberton also commented on occupancy rates at feedlots, estimating typical rates at 59 percent in the Corn Belt and 80–82 percent in the High Plains.

Ms. Sheila Frace, OST, welcomed alternative ways to determine "turns of cattle." Mr. Austin Perez, SBA, responded by indicating that using a range of turns might be simpler.

25-year, 24-hour Storm Event Exemption from Permitting

Mr. John Pemberton, National Cattlemen's Beef Association, asked EPA how many operations have used the "storm exemption to get out of a permit." Mr. Pemberton also inquired why a NPDES permit was needed if the operation has sufficient engineering to protect against discharges. Mr. Don Parrish, American Farm Bureau Federation, agreed with Mr. Pemberton.

Mr. Reg Clause indicated that he is concerned about removing this provision. Mr. Ron Jordan, OST, commented that even if an owner/operator does not intend to discharge, a permit

protects them from liability for certain types of discharges. Without a permit, the CAFO owners/operators could be subject to enforcement by the government or citizens for unpermitted discharges. Mr. Clause also asked what was needed to comply and stated a need for design specifications.

Mr. Scott Mason indicated that he is also concerned about the removal of this exemption. He said there must be “some type of limit or else we will all be permitted.”

Mr. Terry Handke stated a concern that the removal of this exemption could put people out of business.

Ms. Sue Jarrett disagreed with the above SERs and said she wants the exemption removed. Ms. Jarrett added her operation has been engineered enough so that there are no discharges; however, other operations in her State do not have adequate engineering and are not permitted.

Mr. Don Parrish stated that some level of engineering specifications are necessary.

2. January 11, 2000 Conference Call

Case-by-Case Basis

Mr. Jere Glover, SBA, asked whether or not EPA should, on a case-by-case basis, consider different lots in an operation as separate locations or if the operation should be viewed as a whole. Ms. Sue Jarrett commented that this should depend on the operation’s impact on the environment. Mr. Galen Frenzen remarked that this issue “gets back to the problem that one-size-fits-all is difficult.”

Mr. Reg Clause indicated that in regard to site-specific determinations, the regulations should “reach for a goal.” He also indicated that there is no need to permit all operations.

Costs

Mr. Bruce Roos indicated that in order to comply with these regulations, it would cost him approximately \$70,000. Mr. Roos estimated that it would also cost 60–70 percent of the farms in his area this much as well. When Mr. Jim Laity, OMB, asked for an explanation of this cost, Mr. Roos listed the following:

- \$38,000 for an above ground manure tank
- \$ 1,050 for site preparation
- \$ 2,600 for a rock fill
- \$ 580 for a waste transfer line (5 inches)
- \$10,000 for an electric agitator
- \$ 8,200 for a culvert (250 feet by 2 feet)
- \$ 4,675 for a buried mainline
- \$ 915 for participation in a NRCS waste utilization program
- \$ 7,050 for roofing

Mr. Roos indicated that his costs might be a little extreme compared to the average. Mr. Laity asked Mr. Roos to include this information in his written comments.

Mr. Scott Mason stated that concrete lagoons would cost approximately \$1,000 per AU. He also mentioned that this cost is far more accurate than the one calculated by EPA. Mr. Ron Jordan, OST, indicated that EPA is “not shooting for a particular level of imperviousness.”

Mr. Pat O’Toole commented that adding any additional cost to the family farm would be detrimental.

Mr. Jere Glover, SBA, commented that while the cost of increased regulation “would put many of you out of business,” the costs are going to vary for each individual operation.

Mr. Galen Frenzen anticipates that these regulations will cost him about \$6,000.

CNMPs

Mr. Reg Clause indicated that “one size fits all” does not work.

Immature Animals

Mr. Pat O’Toole suggested that EPA prove the viability of large programs before they are reduced to a smaller scale.

Land Application

Mr. Bruce Roos commented how difficult it is to apply manure during the rainy season in his area. He indicated that his operation is equipped to hold about two weeks worth of manure, and a major problem is trying to find the agronomic rate at which to apply the manure.

Threshold

Ms. Sue Jarrett stated that the AU threshold should not be lowered. She indicated that it should be mandatory for all operations with more than 1,000 AUs to receive permits. Ms. Jarrett also stated that operations with less than 1,000 AUs should be permitted on a voluntary basis.

25-year, 24-hour Storm Event Exemption from Permitting

Ms. Sue Jarrett commented that this exemption should include design specifications.

Mr. Terry Handke supports keeping the provision in the regulations.

V Discussion of Issues — Poultry Sector

The following is a brief summary of the issues raised during the poultry portion of each conference call. The comments have been placed under headings, which describe the general topics of conversation.

1. January 5, 2000 Conference Call

Co-permitting

Mr. Austin Perez, SBA, commented that contract growers are in a “risk sharing arrangement.” Mr. V.O. Campbell stated that because contract growers do not share a risk in the cost of the feed, or in any other area, they should not be included in the \$.35 per pound. Mr. Jim Laity, OMB, remarked that a contract grower’s revenues should only be calculated on the amount they receive.

Mr. Campbell asked EPA how many independent poultry operators there are in the United States, indicating that in fact there are none. He also indicated that co-permitting will restrict the freedom of the grower to move from integrator to integrator.

Mr. James Anderson questioned whether or not integrators are going to pass the regulatory costs to growers. He also questioned how the grower was going to overcome the costs. Mr. Anderson indicated that co-permitting would place tremendous amounts of pressure on the grower.

Ms. Katherine Ozer, National Family Farmers’ Coalition, stated that growers are at a disadvantage in that they are responsible for all the risks.

Mr. Laity, OMB, asked SERs if they are currently satisfied with their integrator. Mr. Randy Johnson remarked that if you make one integrator angry, others in the area hold it against the grower. Mr. Johnson further remarked that after 20 years of service, his integrator sold his contract to another contractor.

Mr. Campbell stated that in Mississippi, growers move from integrator to integrator. Ms. Judy Morrison, National Contract Poultry Growers Association, stated that moving from integrator to integrator is not normal practice in most States. She also indicated that the current situation for most poultry growers is not very good. For example, some growers receive only \$.025 per dozen eggs.

Mr. Don Parrish, American Farm Bureau Federation, questioned who would be liable for the violation of the permit. Mr. Anderson indicated that the integrator will hold the growers liable.

Costs

Mr. Don Parrish, American Farm Bureau Federation, would like to see a catalog of costs associated with all of the options EPA is proposing. Mr. Parrish also indicated that since SERs are working on a very short time span, it would be nice to see the costs presented in a simpler manner.

Mr. Randy Johnson stated a concern about EPA’s cost analysis. He indicated that while

he only makes \$.07 per dozen eggs, EPA used \$.65 per dozen in its cost calculations.

CNMPs

Mr. V.O. Campbell wondered what recourse a certified permit writer has. He indicated that in Mississippi, Natural Resources Conservation Service writes the plan. After the plan is complete, it is sent to the Department of Environmental Quality (DEQ). DEQ then writes a permit based on the actual CNMP. Ms. Katherine Ozer, National Family Farmers' Coalition, asked Mr. Campbell, "If you did not receive any money for natural disasters then you would not have to apply for a permit?" Mr. Campbell answered affirmatively.

Mr. James Anderson commented that litter is viewed by producers as an asset. Mr. Gerald Johnson agreed with Mr. Anderson. Based on these comments, Mr. Austin Perez, SBA, asked SERs, "How many rely on a source of groundwater that could possibly be affected by pollution?" Mr. Campbell answered by stating that in Mississippi there is no groundwater pollution; however, due to a lack of monitoring data, he was not certain if there was surface water pollution.

Mr. Campbell asked EPA if it was possible to obtain a permit without developing a CNMP. Ms. Karen Metchis, OWM, indicated that this would not be possible.

Definition of a Small Business

Mr. Tom Kelly, Chair, commented that the definition of a small business is based upon its economic size. However, basing entities on dollar threshold becomes difficult for independents and contract growers because contract growers receive less per bird than independent growers.

Threshold

Mr. V.O. Campbell stated that he does not want the threshold to be lowered because this would "include just about every operation in his area." Mr. Campbell wondered why the threshold could not be raised. He mentioned that Alabama raised its broiler threshold to 125,000.

2. January 11, 2000 Conference Call

Co-permitting

Mr. V.O. Campbell commented that co-permitting will 1) increase the contact between the grower and the integrator, and 2) reduce the ability of the grower to change integrators. Mr. Don Parrish, American Farm Bureau Federation, agreed and added that co-permitting will cause structural changes within the industry.

Mr. Randy Johnson said that he is concerned about co-permitting because it will bring “legal changes to the permitting process,” and he questioned the legal authority for co-permitting. Mr. Paul Bangser, OGC, briefly explained, EPA’s authority to require co-permitting.

Costs

Mr. Randy Johnson indicated that the cost of implementing some of these changes will be high. Mr. Craig Miller agreed and added that he will provide additional information on costs in his written comments.

Mr. Don Parrish, American Farm Bureau Federation, asked if EPA’s costs were “an average across all growers.” Ms. Janet Goodwin, OST, answered affirmatively. Mr. Parrish added that the average indicates costs will be higher for some operations.

Definition of a Small Business

Ms. Sheila Frace, OST, stated that when comparing revenues within each industry, the percentage of small entities were:

- 98% — Cattle
- 94% — Swine
- 90% — Dairy
- nearly 100% — Poultry

Mr. Jim Laity, OMB, added that the Panel realizes the concerns of defining small entities. He assured SERs that an approach is being evaluated; however, no decisions have yet been made.

Mr. James Anderson questioned the modeling assumptions used to estimate annual entity-level revenue. He referred to the outreach mailing dated December 28, 1999, Attachment 3, Table 3–2, page 17. Mr. Anderson said the chart displays “out of reach figures.”

Economic Achievability

Mr. Don Parrish, American Farm Bureau Federation, asked EPA about the economic achievability of the CAFO Rules. Ms. Sheila Frace, OST, commented that economic achievability is a statutory requirement that EPA must evaluate in terms of “cost of compliance.” Ms. Frace also added that data lags, and the inability to determine the affiliations of many operations, complicates the evaluation.

Revenues

Mr. Jere Glover, SBA, asked SERs what percentage of their revenues originated from

poultry operations. Mr. Randy Johnson answered 70 percent. Mr. V.O. Campbell answered less than 40 percent.

ATTACHMENT A

Meeting Agenda

SBREFA Small Business Advocacy Review Panel Outreach

National Pollutant Discharge Elimination Systems (NPDES)
and
Effluent Limitation Guideline (ELG)
for Concentrated Animal Feeding Operations
(CAFO Rule)

Date: January 5, 2000

Place: Conference Room 6530
EPA's Ariel Rios Building
12th & Pennsylvania Ave., NW
Washington, DC

Times/Conference Lines: Swine Sector — 10 AM to 12 Noon (EST)
202-260-1015, access code 0452#
Beef, Dairy and Exotic Sectors — 1 PM to 3 PM (EST)
202-260-1015, access code 9736#
Poultry (Broilers, Layers, Turkeys) Sector — 3:30 to 5:30 PM
(EST)
202-260-1015, access code 7120#

Tom Kelly 10 min

OW 20 min

All 20 min

All 60 min

List of Regulatory Flexibility Options
Costs

Tom Kelly 10 min

ATTACHMENT B

Meeting Agenda

BREFA Small Business Advocacy Review Panel Outreach
ational Pollutant Discharge Elimination Systems (NPDES)
and
Effluent Limitation Guideline (ELG)
for Concentrated Animal Feeding Operations
(CAFO Rule)

Date: January 11, 2000

Place: WIC Conference Room 2, South
EPA's Ariel Rios Building
12th & Pennsylvania Ave., NW
Washington, DC

Poultry (Broilers, Layers, Turkeys) Sector — 1:00 to 2:00 PM (EST)
202-690-4529, access code 6685#
Beef, Dairy and Exotic Sectors — 2:00 to 3:00 PM (EST)
202-690-4529, access code 6685#

Tom Kelly 5 min

All 10 min

All 40 min
List of Regulatory Flexibility Options
Costs

Tom Kelly 5 min

**APPENDIX F:
WRITTEN COMMENTS
FROM SMALL ENTITY REPRESENTATIVES
SOLICITED BY THE PANEL AT
THE JANUARY 5 AND JANUARY 11, 2000
CONFERENCE CALLS**

**APPENDIX G:
SUPPORTING BACKGROUND INFORMATION
FOR ESTIMATES PROVIDED IN
SECTION 5**

Table 5.1 of the report shows the estimated number of AFOs by animal sector and farm size for 1997. Broken out among AFOs with more than 1,000 AU, AFOs with between 300 and 1,000 AU, and AFOs with fewer than 300 AU, the method used to determine the core data estimates of the number of AFOs across all farm sizes is described below.

EPA's estimates of the number of animal feeding operations (AFOs) were determined using the 1997 Census of Agriculture and other data from USDA's National Agriculture Statistical Service (NASS). Other supplemental data and information were obtained from industry, State agriculture extension agencies and the land grant universities.

Farm count estimates for hogs, layers and dairy were derived from Census data of "farms with inventory." Farm count estimates for broilers and turkeys were derived from Census data of "farms with sales." Farm size was approximated from sales data by dividing sales numbers by a turnover rate. For this analysis, EPA assumed the following turn-over rates:

- broilers: 5.5 turns (or marketings) annually;
- swine: 2.8 turns;
- turkeys: 3 turns; and
- beef: ranges from an average of 1.65 to 2 turns.

These estimates were converted to EPA animal units, assuming that 1,000 animal units (AU) are equal to:

- 2,500 swine over 55 lbs;
- 55,000 turkeys;
- 30,000 layers using wet manure systems;
- 100,000 layers or broilers using dry systems;
- 700 mature dairy; and
- 1,000 beef cattle.

For farm size category (<300AU, 300AU–1,000AU, >1,000AU) data were interpolated to approximate that size category.

For beef and dairy, Census data indicate that 3,000 potential AFOs have more than one animal type present at a site. 1992 Census data indicate that roughly 200 to 250 CAFOs (i.e., those over 1,000 animal units) were identified and these facilities have more than a single animal type on-site. About 25 percent of the smaller facilities have multiple animal types. This 25 percent estimate was used to derive the total number of AFOs nationwide, accounting for facilities with more than one animal type.

Information from industry and EPA site visits confirm that smaller farms are more likely to have multiple animal types than larger farms.

In addition, small operations are more likely to be rangeland or pasture-based, and therefore not confinement CAFOs. Estimates for the beef and dairy sectors are presumed to exclude most of the pasture based facilities,

ow-calf operations. Supporting industry information for this assumption is cited below.

SDA's Swine '95 report, 1 to 2 percent of large (more than 10,000 head sales) are farrowing facilities and no produced pigs on pasture. 23 percent of small swine operations in the Midwest less than 2,000 head of sales on pasture.

obtained from EPA farm site visits, most poultry operations utilize some form of housing to produce birds. Raising pullets for laying hen replacements are not counted.

Regulatory Option

Table 5.2 of the report shows the estimated number of AFOs with between 300 AUs and 1,000 AUs by state that may be impacted by various regulatory options under consideration.

These numbers are derived from estimates of the percentage of qualifying operations by region and animal criteria were evaluated:

- any conveyance from feedlot,
 - improper land application,
 - insufficient storage,
 - operations in watersheds with waters impaired by pathogens or nutrients,
 - operations with greater than 2 animal units per acre,
 - operations within 100 feet of U.S. waters,
- in areas where nutrients (nitrogen and phosphorus) from manure exceed the nutrient requirements of crops

and is presented in the following subsections. Among the data sources for these estimates are included: 1997 Agriculture, Vol.1; Cattle: Final Estimates 1994–1998; Milking Cows and Production: Final Estimates 1993–1998; Chickens and Eggs: Final Estimates 1994–1997; Swine '95), industry-supplied data and comments, and EPA

Any conveyance from feedlot. The estimated percentage of AFOs with 300 to 1,000 animal units that discharge into waters of the U.S. was determined by using information from guidance documents and best management by USEPA's Office of Wastewater Management. It was estimated that 11 percent of swine and 16 percent of beef operations fall under this category. No poultry operations were included in this category. If the regulatory option selected, all small operations meeting this condition — with the exception of dairies — may need a permit.

Improper land application. Depending on the regulatory option selected, all small operations meeting this condition with the exception of dairies — may need a permit.

Insufficient storage. EPA's estimate of the number of the operations with insufficient storage was derived from published sources.

Estimates of the percentage of operations with insufficient storage are as follows:

operations with 300 to 1,000 animal units (based on personal communications with Mike Brumm, Nebraska Agricultural Experiment Station, November 1999);

operations (based on personal communications with Paul Patterson, University of Pennsylvania and North Carolina State University (NCSU), Biological and Agricultural Engineering Department;

operations and 9 percent for dry layer operations (based on survey information provided by the Egg Production Survey, University of Pennsylvania, to USEPA Paul Shriner 6/3/99);

operations (based on personal communications with Paul Patterson, University of Pennsylvania and NCSU, Biological and Agricultural Engineering Department, 1998. Swine and Poultry Industry Characterization, Waste Management Detailed Analysis of Predominantly Used Systems);

operations [based on information regarding manure spreading practices, especially as related to daily spreading practices (Bredencamp, 1999; Holmes, 1999)]; and 50 percent for beef operations with 300 to 1,000 animal units (Bredencamp, 1999).

of facilities in this size category have limited effluent controls for the facilities, and accordingly manure discharge from these facilities should be considered in an uncontrolled situation. Estimate also based on contacts from beef producing states who reported that 5 percent of facilities have insufficient storage (Bracht, 1999; Byron, 1999).

EPA estimates that 50 percent of all operations meeting this condition could verify that they have no potential to discharge and would not need a permit under some regulatory options.

Operations in watersheds with waters impaired by pathogens or nutrients. Estimates of the number of watersheds with waters impaired by pathogens or nutrients was developed from USDA published sources and watersheds by 8-digit hydrologic unit codes (HUC) for impaired by nutrients and pathogens.

The number of operations, by animal type was overlaid with the watershed data using a geographic information system (ArcView) to determine the number of operations in each watershed. If a watershed had watersheds with waters impaired by nutrients or pathogens, all operations in the watershed were assumed meet this criterion. EPA estimates that 50 percent of operations meeting this criterion could verify that they have no potential to discharge and therefore would not need a permit under some regulatory options.

Greater than two AUs per acre. Percentages of covered operations were developed using tables provided by USDA NASS that presented 1992 Census of Agriculture data on average head count and acreage by region. Percentages were used with the 1997 Census of Agriculture operation counts to determine the number of facilities meeting this criterion. EPA estimates that 50 percent of operations meeting this criterion could verify that they have no potential to discharge and therefore would not need a permit under some regulatory options.

Within 100 feet of U.S. waters. EPA's estimate of the number of operations with the feedlot within 100 feet was derived from USDA published sources, contacts with state extension specialists, and best judgement by USEPA's Office of Wastewater Management. Estimates of the percentage of operations where the feedlot is within 100 feet of water are as follows:

Operations (based on personal communication with Terry Steinhart, Iowa State University, Extension Swine and Mike Brumm, Nebraska Extension Swine Specialist, November 1999);
Operations (based on personnel communications with Paul Patterson, University of Pennsylvania and Patsy Reid, and observations of industry practices in Kansas and Arkansas);
Operations of between 300 and 1,000 animal units (based on personal communications with the following dairy extension specialists: William May 1999. Michigan State University, Dairy Housing Extension Specialist, Lansing, MI; Orth, Robert. May 1999. Iowa Institute of Cooperatives, Dairy Development Consultant; Groves, Robert. May 1999. Pennsylvania State University, Extension; Holmes, Brian. May 1999. University of Wisconsin-Extension, Farm Structures Specialist; and U.S. Department of Agriculture, EQIP Dairy Education Program, California); and
Operations based on best professional judgement (USEPA Office of Wastewater Management, 1999).

Operations meeting this criterion could verify that they have no potential to discharge and therefore would not need a permit or other regulatory options.

Operations located in areas where nutrients (nitrogen and phosphorus) from manure exceed the limits of crops and pasture. The estimate of the number of the operations in watersheds with watersheds impaired by pathogens or nutrients was developed using 1997 Census of Agriculture county level information, EPA's list of 8-digit hydrologic unit codes (H.C.) impaired by nutrients and pathogens. The number of operations, by county, from the 1997 Census of Agriculture was overlaid with the watershed data using a geographic information system (GIS) to determine the number of operations in each watershed. If a watershed had waters impaired by pathogens, all operations in the watershed were assumed to be subject to this regulatory option. EPA estimates that 10% of those operations meeting this criterion have no potential to discharge and therefore would not need a permit or other regulatory options. The operations were then summed and are shown in Table 7.