manure and the environment has been shown to result in antibiotic resistant pathogens. EPA solicits comments on the direct effects of antibiotic residues and antimicrobial resistance, specifically on how manure management may contribute to the problem of antibiotics reaching the environment and contributing to pathogen resistance. EPA also solicits data and information on effective treatment or practices that may be implemented by CAFOs to reduce these releases.

IX. Implementation of Revised Regulations

A. How Do the Proposed Changes Affect State CAFO Programs?

EPA is proposing a number of changes to the effluent guidelines and the NPDES permit regulations for CAFOs in today's proposed rule. Under 40 C.F.R. § 123.25, authorized NPDES State programs must administer their permit programs in conformance with NPDES requirements, including the requirements that address concentrated animal feeding operations (§ 122.23) and the incorporation of technology-based effluent limitation guidelines and standards in permits (§ 122.44). Thus, today's proposed rule would require the 43 States [note that State is defined in §122.2] with authorized NPDES permit programs for CAFOs to revise their programs as necessary to be consistent with the revised federal requirements. Current NPDES regulations note that authorized NPDES State permit programs are not required to be identical to the federal requirements; however, they must be at least as stringent as the federal program. States are not precluded from imposing requirements that are more stringent than those required under federal regulations.

Any State with an existing approved NPDES permitting program under section 402 must be revised to be consistent with changes to federal requirements within one year of the date of promulgation of final changes to the federal CAFO regulations [40 C.F.R. § 123.62(e)]. In cases where a State must amend or enact a statute to conform with the revised CAFO requirements, such revisions must take place within two years of final changes to the federal CAFO regulations. States that do not have an existing approved NPDES permitting program but who seek NPDES authorization after these CAFO regulatory provisions are promulgated must have authorities that meet or exceed the revised federal CAFO regulations at the time authorization is requested.

In States not authorized to administer the NPDES program, EPA will implement the revised requirements. Such States may still participate in water quality protection through participation in the CWA section 401 certification process (for any permits) as well as through other means (e.g., development of water quality standards, development of TMDLs, and coordination with EPA).

EPA is aware that the majority of States authorized to implement the NPDES program supplement the NPDES CAFO requirements with additional State requirements, and some States currently regulate or manage CAFOs predominantly under State non-NPDES programs. It has been suggested that EPA provide a mechanism through which State non-NPDES CAFO programs can be recognized alternatives that would be authorized under the CWA.

No permit issued by a non-NPDES program will satisfy the NPDES permit requirement. Facilities required to be covered by a NPDES permit must obtain a permit from an agency authorized to issue a NPDES permit. However, EPA believes that the current NPDES program provides a reasonable degree of flexibility consistent with CWA requirements, and that the proposed CAFO regulation provides opportunities to incorporate State programs in several ways.

It is possible for non-NPDES State programs that currently regulate AFOs to gain EPA's approval as NPDES-authorized programs. Such a change would require a formal modification of the State's approved NPDES program, and the State would have to demonstrate that its program meets all of the minimum criteria specified in 40 CFR Part 123, Subpart B for substantive and procedural regulations. Among other things, these criteria include the restriction that permit terms may not exceed 5 years, and include provisions on public participation in permit development and enforcement, and EPA enforcement authority.

In addition, today's proposal provides specific flexibility on particular issues. First, with regard to the off-site transfer of manure, EPA is requiring under one co-proposed option that the CAFO operator obtain a certification from recipients that, if they intend to land apply the manure, it will be done according to appropriate agricultural practices. EPA is proposing to waive this requirement in a State that is implementing an effective program for addressing excess manure generated by CAFOs. Second, EPA is proposing to require that processors be permitted, or co-permitted, along with their contract producers. EPA is requesting comment on an option that would waive this requirement in certain instances in States with effective programs for managing excess manure. EPA is also soliciting comment on one particular type of program, an Environmental Management System developed by the processor, as sufficient to waive co-permitting requirements. EPA is interested in comments on other specific requirements of today's proposal that might be satisfied in whole or in part by State program requirements. This could include ways to ensure that states with unique programs that meet or exceed the provisions of the revised regulations and the CWA requirements could utilize their own programs that include similar objectives such as enhanced water quality protection, public participation and accountability,

A third possible means of providing flexibility for States would be available if the three-tier regulatory structure is adopted in the final regulation. In the three-tier structure, all facilities over 1,000 AU would be considered CAFOs by definition, and those between 300 AU and 1,000 AU would be CAFOs only if they meet one of several conditions, described in detail in Section VII.B.3, or if designated by the permit authority as a significant contributor of pollution to waters of the U.S. Those with fewer that 300 AU would become CAFOs only if designated by the permit authority. A State with an effective non-NPDES program could succeed in helping many operations avoid permits by ensuring they do not meet any of the conditions that would define them as CAFOs.

EPA is also soliciting comment on whether or not to adopt both the two-tier and the three-tier structures, and to provide a mechanism to allow States to select which of the two alternative proposed

structures to adopt in their State NPDES program. Under this option, a State could adopt the structure that best fits with the administrative structure of their program, and that best serves the character of the industries located in their State and the associated environmental problems. This option is viable only if the Agency is able to determine that the two structures provide substantially similar environmental benefits by regulating equivalent numbers of facilities and amounts of manure. Otherwise, States would be in a position to choose a less stringent regulation, contrary to the requirements of the Clean Water Act. A discussion of this option can be found in Section VII.B.4.

The requirements for State NPDES program authorization are specified under § 402(b) of the CWA and within the broad NPDES regulations (40 CFR Part 123). These provisions set out specific requirements for State authorization applicable to the entire NPDES program and the Agency does not believe that broad changes to these requirements are appropriate in this proposed rulemaking.

B. How Would EPA's Proposal to Designate CAFOs Affect NPDES Authorized States?

Today's proposal would provide explicit authority, even in States with approved NPDES programs, for the EPA Regional Administrator to designate an AFO as a CAFO if it meets the designation criteria in the regulations. EPA's authority to designate AFOs as CAFOs would be subject to the same criteria and limitations to which State designation authority is subject. However, EPA does not propose to assume authority or jurisdiction to issue permits to the CAFOs that the Agency designates in approved NPDES States. That authority would remain with the approved State. EPA requests comment on this prosed new designation authority.

C. How and When Will the Revised Regulations be Implemented?

EPA anticipates that this these proposed regulations will be promulgated as final regulations in December, 2002, and published in the Federal Register shortly thereafter (approximately January, 2003). As mentioned, authorized States programs will need up to two years after that date to revise their programs to reflect the new regulations. Following a State's revision of its program and approval of the revisions by EPA, we expect many States to want additional time to develop new or revised CAFO general permits. EPA believes it is reasonable to allow States one additional year to develop these new or revised general permits. To summarize, some States will need until approximately January 2006 -- i.e., three years after the final rule is published -- before they can make CAFO general permits available that reflect the new regulations in the State.

At the same time, once these regulations are finalized, we estimate that there will be a large number of operations that will need to apply for a permit, described in Section VII.B.4. It is important to take into account that some States will not be making CAFO general permits available to these facilities until three years after the final rule. If EPA were to make the new Part 122 regulations effective shortly after we issue the final rule (January 2003), there would be large numbers of facilities

that would be newly defined as CAFOs at that time. They would be required to apply for a permit right away, but States would not be able to issue general permits at that time or a large number of individual permits all at once. This would leave the facilities potentially in the detrimental position of being unpermitted dischargers.

To avoid this situation, EPA proposes that the revisions to the CAFO definition in Part 122 (including, for example, changes to the threshold number of animals to qualify as a CAFO and other changes such as the elimination of the 25-year, 24-hour storm exemption) would not take effect until three years after publication of the final rules. See proposed section 122.23(f). We expect, therefore, that these changes would not take effect until approximately January, 2006. Operations that are brought within the regulatory definition of a CAFO for the first time under these regulatory revisions would not be defined as CAFOs under final and effective regulations until that date.

EPA also considered an alternate approach in which the effective date for the Part 122 revisions would be different in each State, depending on when the State actually adopted and got approval for the changes and issued general permits. An advantage of this approach would be that the new regulations would potentially be effective at an earlier date, i.e., before January 2006, in some States. EPA is not proposing this approach, however. We decided that it would be preferable to provide one uniform effective date for these particular revisions, which would provide necessary clarity and consistency to the national NPDES program for CAFOs. EPA does seek comment, however, on which approach would be preferable to adopt in the final regulations. States, however, are free to implement more stringent requirements, and may choose to implement the revised CAFO definition at an earlier date.

It should be noted that EPA is proposing this delayed effective date only for the proposed regulatory changes that affect which operations would be defined as CAFOs. There is no need to delay the effective date of any of the other revisions EPA is proposing to the CAFO regulations at 40 CFR Part 122, such as those that specify land application requirements and other requirements. These other revisions to the Part 122 regulations would become effective 60 days after publication of the final regulations (January 2003). For any operation that is a CAFO according to the current definition and that is being permitted after that date, or having its permit renewed, the permit would be developed under these new Part 122 provisions.

EPA is proposing that the revised effluent guidelines, once promulgated as final regulations, would be effective 60 days after promulgation. The 1989 statutory deadline for meeting BAT has long passed, and we do not believe there is any reason why permit writers could not begin incorporating the revised effluent guidelines into permits beginning 60 days after promulgation.

If a CAFO submits a timely application for a permit renewal, but has not received a decision on that application prior to the expiration date of the original permit, then the original permit would be administratively "continued" until there is a decision from the permit authority on the new application (in

EPA-administered States and States with comparable administrative procedure laws). If that continuance lasts beyond the date that is the effective date of the revised NPDES regulations and effluent guidelines, then the CAFO's new permit would reflect both sets of new regulations.

EPA also proposes to adopt specific timing requirements in the permit with respect to the CAFO's development of PNPs. As described in Section VIII, EPA proposes to establish BAT as encompassing the following timing requirements: 1) for all new permittees and for applicants who hold existing individual permits, compliance with the PNP would be an immediate requirement of the permit. Therefore, the draft PNP must be submitted to the permit authority along with the permit application or NOI; the final PNP must be adopted by the permittee within 90 days of being permitted; 2) for applicants who are authorized under an existing general permit, the permittee must develop a Permit Nutrient Plan within 90 days of submittal of the NOI; and 3) the PNP for all CAFOs would need to include milestones for implementation. This time is necessary because, while operators can begin preparing necessary data, it would be difficult to develop a PNP before the permit authority issues a final permit that specifies the terms and conditions of the permit. (Operators of existing CAFOs with individual NPDES permits, who must submit their draft PNP with the permit application, are expected to reapply for coverage under the revised regulation early enough to provide time to develop its PNP without causing a lapse in coverage.) For facilities that have been designated as CAFOs, the permit writer will develop the implementation schedule in order to provide reasonable time to prepare the PNP.

Prior to the effective date of the revised regulations, State and EPA permit authorities will be issuing permits to facilities that currently meet the definition of a CAFO under the existing regulations or that have been designated as CAFOs. Consistent with the AFO Strategy, discussed in section III.B., during 2000 to 2005 States with authorized NPDES programs are to focus on issuing permits to the largest CAFOs, those with 1,000 AU or greater. In States where EPA is the permit authority, EPA will issue permits to operations defined as CAFOs that are over 300 AU. The permits are valid for a maximum of five years, at which time these facilities would obtain new permits under the revised regulation.

One of the significant changes to the NPDES and ELG regulation for CAFOs will be the requirement to develop and implement Permit Nutrient Plans that are developed, or reviewed and approved, by certified planners. Concern has been raised about the availability of the necessary expertise to develop and certify the plans. EPA believes that there will be sufficient lead time before this regulation is implemented to expect the market to have developed the CNMP and PNP planning expertise and infrastructure because, during this period, CNMPs will be developed under both the USDA voluntary program and EPA's Round I permitting.

For facilities subject to the requirements of the revised regulation, EPA anticipates that during the period between the time this regulation is promulgated and the time it is effective, operators will be able to anticipate the status of their facilities, and therefore can begin gathering data that will be needed

for the Permit Nutrient Plan and other requirements, such as soil type, manure sampling, cropping information, and other data needed to calculate the allowable manure application rate. (Note: States are supposed to have adopted their NRCS 590 standard by May 2001.)

EPA also proposes that CAFOs that are new sources may not receive permit coverage until the PNP is developed. In this case, a complete application must include the PNP. The owner or operator of a new facility is expected to design and construct the new facility in a manner that anticipates the ELG and NPDES requirements for manure management, rather than incurring the costs of retrofitting an already constructed facility.

EPA recognizes that some practices such as liners and groundwater wells for beef and dairy operations may take time to implement. The PNP will include a schedule for implementing the provisions of the PNP, including milestones with dates.

Facilities Constructed After the Proposed Regulation is Published.

EPA is soliciting comment on whether the revised regulations should apply 60 days after publication of the final rule to facilities that commence operation after that date, even if they would not be defined as a CAFO under the existing rules. Although EPA is proposing to delay for three years the effective date of the proposed regulations for existing facilities that are not currently defined as CAFOs, it is considering whether to require all facilities defined as CAFOs under the final rule that commence operation after the final rule is published to obtain an NPDES permit and comply with the other requirements of the final rule . For example, a dry poultry operation or an animal feeding operation of 501 cattle that is constructed during the three year period after publication of the final rule might be required to comply immediately with the revised regulations rather than remaining outside the scope of the NPDES program until three years after publication of the final rule.

Requiring newly constructed facilities to obtain permits does not pose the same problem as requiring all existing AFOs which are not defined as CAFOs under the current rule to obtain permits immediately after promulgation of the final rule. Once a new definition of a CAFO becomes effective, a large number of existing facilities would need a permit on the same date. EPA expects that most existing facilities will seek coverage under a general permit. However, EPA and authorized States will need some time after the final rule is promulgated to develop those general permits. An existing facility would face the dilemma of either ceasing operations or discharging without a permit if it was required to obtain a permit but none was available. By contrast, new facilities would commence operation over a period of time and present less of a burden on permit authorities. If a general permit was not available, issuing individual permits to the smaller number of newly constructed facilities would present less of a burden. If all else fails, a newly constructed facility could not commence operation until it had a permit. This approach would be consistent with EPA's general approach for regulation of new sources and new dischargers, who are required to obtain an NPDES permit (and comply with any applicable NSPS) prior to commencing operation. See 40 CFR 122.29, 124.60(a). Finally, unlike an existing

facility, a newly constructed facility is in a better position to plan its facility to comply with the revised regulations.

If EPA did not delay the effective date for facilities that are constructed after the final rule is published, the rule would address additional sources sooner. On the other hand it would further complicate the regulatory structure because it would temporarily create another category of facilities. EPA solicits comments on whether all provisions of the rule should be effective 60 days after the final rule is published for facilities that are constructed after that date.

D. How Many CAFOs are Likely to be Permitted in Each State and EPA Region?

Tables 9-1 and 9-2 delineate the number of facilities, in each State and EPA Region, that are expected to be affected by either of today's proposed two-tier and three-tier structures, respectively. In both proposed structures, all CAFOs with more than 1,000 AU would be required to apply for a NPDES permit. The differences lie primarily in how the middle-sized operations are affected.

Table 9-1. Projected Estimated Number of Potential CAFOs Potentially Regulated Under the Three-Tier Structure by Region, State and Size

| Three-Tier Structure by Region, State and Size | | | | | | | | | |
|--|---------------|---------|----------|----------|----------|--------|----------|-------|----------|
| EPA | ~ | | | 300- | | >1,000 | | | |
| Region | State | <300 AU | | 1,000 AU | | AU | | Total | |
| | | | Regional | | Regional | | Regional | | Regional |
| | | | Subtotal | | Subtotal | | Subtotal | | Subtotal |
| Region 1 | Connecticut | 0 | | 39 | | 9 | | 48 | |
| | Maine | 0 | | 60 | | 8 | | 68 | |
| | Massachusetts | 0 | | 41 | | 7 | | 48 | |
| | New Hampshire | 0 | | 29 | | 4 | | 33 | |
| | Rhode Island | 0 | | 5 | | 0 | | 5 | |
| | Vermont | 0 | | 129 | | 15 | | 144 | |
| | | | 0 | | 303 | | 43 | | 346 |
| Region 2 | New Jersey | 0 | | 27 | | 6 | | 33 | |
| - 0 | New York | 0 | | 514 | | 79 | | 593 | |
| | | | 0 | | 542 | | 85 | | 627 |
| Region 3 | Delaware | 0 | | 332 | | 97 | | 429 | |
| | Maryland | 0 | | 437 | | 137 | | 573 | |
| | Pennsylvania | | | 628 | | 321 | | 949 | |
| | Virginia | 0 | | 551 | | 216 | | 767 | |
| | West Virginia | 0 | | 135 | | 75 | | 210 | |
| | | | 0 | | 2,084 | | 845 | | 2,929 |
| Region 4 | Alabama | 0 | | 1,224 | | 557 | | 1,782 | |

| EPA | | | | 300- | | >1,000 | | | |
|----------|--------------|---------|----------|----------|----------|--------|----------|-------|----------|
| Region | State | <300 AU | | 1,000 AU | | AU | | Total | |
| | | | Regional | | Regional | | Regional | | Regional |
| | | | Subtotal | | Subtotal | | Subtotal | | Subtotal |
| | Florida | 0 | | 247 | | 169 | | 416 | |
| | Georgia | 0 | | 1,360 | | 834 | | 2,193 | |
| | Kentucky | 0 | | 233 | | 179 | | 412 | |
| | Mississippi | 0 | | 766 | | 433 | | 1,199 | |
| | N. Carolina | 0 | | 1,454 | | 1,218 | | 2,672 | |
| | S. Carolina | 0 | | 306 | | 201 | | 508 | |
| | Tennessee | 0 | | 265 | | 114 | | 378 | |
| | | | 0 | | 5,854 | | 3,706 | | 9,560 |
| Region 5 | Illinois | 1 | | 461 | | 377 | | 839 | |
| | Indiana | 1 | | 455 | | 328 | | 784 | |
| | Michigan | 1 | | 345 | | 144 | | 490 | |
| | Minnesota | 2 | | 785 | | 496 | | 1,283 | |
| | Ohio | 0 | | 369 | | 217 | | 586 | |
| | Wisconsin | 3 | | 574 | | 141 | | 718 | |
| | | | 8 | | 2,988 | | 1,704 | | 4,700 |
| Region 6 | Arkansas | 0 | | 1,418 | | 580 | | 1,999 | |
| | Louisiana | 0 | | 211 | | 86 | | 297 | |
| | New Mexico | 0 | | 30 | | 112 | | 141 | |
| | Oklahoma | 0 | | 289 | | 175 | | 464 | |
| | Texas | 0 | | 841 | | 675 | | 1,516 | |
| | 2 0.1405 | | 0 | 0.11 | 2,789 | 0.0 | 1,629 | 1,610 | 4,418 |
| Region 7 | Iowa | 2 | | 1,440 | | 1,318 | | 2,760 | |
| Region / | Kansas | 0 | | 188 | | 277 | | 465 | |
| | Missouri | 0 | | 449 | | 321 | | 770 | |
| | Nebraska | 0 | | 442 | | 641 | | 1,083 | |
| | 1 COI aska | 0 | 2 | 772 | 2,519 | 041 | 2,557 | 1,003 | 5,078 |
| | | | | | | | | | |
| Region 8 | Colorado | 0 | | 121 | | 210 | | 331 | |
| | Montana | 0 | | 32 | | 55 | | 87 | |
| | North Dakota | 0 | | 35 | | 28 | | 63 | |
| | South Dakota | 0 | | 181 | | 177 | | 358 | |
| | Utah | 0 | | 123 | | 53 | | 176 | |
| | Wyoming | 0 | | 18 | | 24 | | 42 | |
| | , B | | 0 | | 509 | | 548 | | 1,057 |
| | | | | | | | | | |

| EPA | | | | 300- | | >1,000 | | | |
|----------------------------|------------|---------|----------|----------|----------|--------|----------|--------|----------|
| Region | State | <300 AU | | 1,000 AU | | AU | | Total | |
| | | | Regional | | Regional | | Regional | | Regional |
| | | | Subtotal | | Subtotal | | Subtotal | | Subtotal |
| Region 9 | Arizona | 0 | | 30 | | 83 | | 113 | |
| | California | 0 | | 956 | | 1,031 | | 1,988 | |
| | Hawaii | 0 | | 16 | | 16 | | 33 | |
| | Nevada | 0 | | 15 | | 20 | | 35 | |
| | | | 0 | | 1,017 | | 1,151 | | 2,168 |
| Region10 | Alaska | 0 | | 3 | | 1 | | 4 | |
| | Idaho | 0 | | 176 | | 151 | | 328 | |
| | Oregon | 0 | | 156 | | 72 | | 228 | |
| | Washington | 0 | | 320 | | 168 | | 488 | |
| | | | 0 | | 655 | | 392 | | 1,047 |
| Total Potential Permittees | | 10 | | 19,260 | | 12,660 | | 31,930 | |

Note: An additional 7,000 facilities in the 300 AU to 1,000 AU size category would potentially be subject to the rule, but are projected to file a certification indicating that they do not need to apply for a permit.

Table 9-2. Projected Estimated Number of Potential CAFOs Potentially Regulated Under the Two-Tier Structure by Region, State and Size

| EPA Region | State | <500 AU | | 500- 1,000 AU | | >1,000 AU | | Grand Total | |
|---------------|------------------|---------|----------------------|------------------|----------------------|--------------|----------------------|----------------|----------------------|
| | | | Regional Subtotal | | Regional Subtotal | | Regional Subtotal | | Regional Subtotal |
| Region 1 | Connecticut | 1 | | 22 | | 9 | | 32 | |
| | Maine | 1 | | 30 | | 8 | | 39 | |
| | Massachusetts | 1 | | 21 | | 7 | | 29 | |
| | New Hampshire | 1 | | 15 | | 4 | | 20 | |
| | Rhode Island | 0 | | 2 | | 0 | | 3 | |
| | Vermont | 3 | | 64 | | 15 | | 82 | |
| | | | 7 | | 153 | | 43 | | 204 |
| Region 2 | New Jersey | 1 | | 15 | | 6 | | 22 | |
| | New York | 21 | | 259 | | 79 | | 359 | |
| | | | 22 | | 274 | | 85 | | 380 |
| Region 3 | Delaware | 3 | | 169 | | 97 | | 268 | |
| | Maryland | 5 | | 229 | | 137 | | 371 | |

| EPA | | | | 500- | | >1,000 | | Grand | |
|----------|---------------|---------|----------|----------|----------|--------|----------|-------|----------|
| Region | State | <500 AU | | 1,000 AU | | ÁU | | Total | |
| | | | Regional | | Regional | | Regional | | Regional |
| | | | Subtotal | | Subtotal | | Subtotal | | Subtotal |
| | Pennsylvania | 15 | | 380 | | 320 | | 715 | |
| | Virginia | 10 | | 325 | | 216 | | 552 | |
| | West Virginia | 1 | | 94 | | 75 | | 170 | |
| | | | 34 | | 1,197 | | 846 | | 2,076 |
| Region 4 | Alabama | 1 | | 719 | | 557 | | 1,278 | |
| | Florida | 1 | | 178 | | 170 | | 349 | |
| | Georgia | 5 | | 936 | | 833 | | 1,774 | |
| | Kentucky | 7 | | 165 | | 179 | | 351 | |
| | Mississippi | 1 | | 488 | | 433 | | 922 | |
| | N. Carolina | 0 | | 911 | | 1,221 | | 2,133 | |
| | S. Carolina | 1 | | 231 | | 202 | | 434 | |
| | Tennessee | 0 | | 148 | | 114 | | 261 | |
| | | | 16 | | 3,776 | | 3,710 | | 7,502 |
| | | | | | | | | | |
| Region 5 | Illinois | 14 | | 420 | | 377 | | 811 | |
| | Indiana | 6 | | 396 | | 328 | | 730 | |
| | Michigan | 9 | | 222 | | 144 | | 375 | |
| | Minnesota | 30 | | 621 | | 496 | | 1,147 | |
| | Ohio | 3 | | 269 | | 217 | | 489 | |
| | Wisconsin | 25 | | 309 | | 141 | | 475 | |
| | | | 87 | | 2,237 | | 1,703 | | 4,027 |
| | | | | | , | | , | | · |
| Region 6 | Arkansas | 1 | | 777 | | 579 | | 1,357 | |
| | Louisiana | 0 | | 120 | | 86 | | 206 | |
| | New Mexico | 0 | | 26 | | 112 | | 138 | |
| | Oklahoma | 0 | | 165 | | 175 | | 340 | |
| | Texas | 0 | | 532 | | 676 | | 1,208 | |
| | | | 1 | | 1,620 | | 1,628 | , | 3,249 |
| Region 7 | Iowa | 58 | | 1,374 | | 1,318 | | 2,750 | |
| J | Kansas | 5 | | 182 | | 277 | | 464 | |
| | Missouri | 9 | | 323 | | 321 | | 652 | |
| | Nebraska | 11 | | 437 | | 640 | | 1,087 | |
| | | | 83 | | 2,315 | | 2,556 | , | 4,953 |

| EPA Region | State | <500 AU | | 500- 1,000 AU | | >1,000 AU | | Grand Total | |
|---------------|-------------------|---------|----------------------|------------------|----------------------|--------------|----------------------|----------------|----------------------|
| | | | Regional Subtotal | | Regional Subtotal | | Regional Subtotal | | Regional Subtotal |
| Region 8 | Colorado | 0 | | 81 | | 210 | | 291 | |
| | Montana | 0 | | 25 | | 55 | | 80 | |
| | North Dakota | 0 | | 27 | | 28 | | 54 | |
| | South Dakota | 0 | | 149 | | 177 | | 326 | |
| | Utah | 0 | | 65 | | 53 | | 118 | |
| | Wyoming | 0 | | 9 | | 24 | | 33 | |
| | | | 0 | | 355 | | 548 | | 902 |
| Region 9 | Arizona | 0 | | 23 | | 83 | | 106 | |
| | California | 0 | | 545 | | 1,029 | | 1,574 | |
| | Hawaii | 0 | | 10 | | 16 | | 26 | |
| | Nevada | 0 | | 8 | | 21 | | 29 | |
| | | | 0 | | 586 | | 1,149 | | 1,735 |
| Region10 | Alaska | 0 | | 2 | | 1 | | 3 | |
| | Idaho | 0 | | 97 | | 151 | | 248 | |
| | Oregon | 0 | | 82 | | 72 | | 153 | |
| | Washington | 0 | | 167 | | 169 | | 336 | |
| | | | 0 | | 348 | | 393 | | 741 |
| Total Pot | ential Permittees | 250 | 250 | 12,860 | 12,860 | 12,660 | 12,660 | 25,770 | 25,770 |

As described in today's preamble, the three-tier structure would affect more facilities because all AFOs with 300 AU or more would be required to do something. However, not all would be required to apply for a permit, and, depending on the vigor with which States and AFOs seek to avoid the conditions defining these facilities as CAFOs, the actual number of permittees could be smaller. EPA projects that a minimum of 4,000 middle-sized facilities and a maximum of 19,000 would apply for a permit under the three-tier structure. By contrast, the proposed two-tier structure would require all 13,000 facilities between 500 AU and 1,000 AU to apply for a permit.

Further, the number of small facilities likely to be designated differs between the two proposed structures. Under the three-tier structure, EPA expects very few AFOs to be designated, potentially 10 per year nationally. Under the two-tier structure, however, this number is likely to rise to 50 per year, given that AFOs from 300 AU to 499 AU have the potential to generate significant quantities of manure that, if not properly managed, may lead the facility to be a significant contributor of pollution to the waters.

E. Funding Issues

While most CAFO owners and operators are interested in taking appropriate measures to protect and preserve the environment, there are legitimate concerns over the costs of doing so. While EPA's cost analysis indicates that this rule is affordable, some businesses in some locales may experience economic stress. (See Section X). Further, concern has been expressed as to whether facilities below 1,000 AU that become CAFOs due to the changes in this proposed rulemaking may potentially cause operations to lose cost-share money available under EPA's Section 319 Nonpoint Source Program and USDA's Environmental Quality Incentive Program (EQIP). Once a facility is considered a point source under NPDES, the operation is not eligible for cost sharing under the Section 319 nonpoint source program. However, the USDA EQIP program is in fact available to most facilities, and being a permitted CAFO is not a reason for exclusion from the EQIP program. EQIP funds may not be used to pay for construction of storage facilities at operations with greater than 1,000 USDA animal units; however, EQIP is available to these facilities for technical assistance and financial assistance for other practices. One USDA animal unit equals 1,000 pounds of live weight of any given livestock species or any combination of livestock species. (The approximate number of animal equivalents would be: 1,000 head of beef; 741 dairy cows; 5,000 swine, 250,000 layers; and 500,000 broilers).

To this end, EPA anticipates that State and Federal Agencies will facilitate compliance with this rule by providing technical assistance and funding for smaller CAFOs, as available.

F. What Provisions are Made for Upset and Bypass?

A recurring issue of concern has been whether industry guidelines should include provisions authorizing noncompliance with effluent limitations during periods of "upsets" or "bypasses". An upset, sometimes called an "excursion," is an unintentional noncompliance occurring for reasons beyond the reasonable control of the permittee. It has been argued that an upset provision is necessary in EPA's effluent limitations because such upsets will inevitably occur even in properly operated control equipment. Because technology based limitations require only what the technology can achieve, it is claimed that liability for such situations is improper. When confronted with this issue, courts have disagreed on whether an explicit upset exemption is necessary, or whether upset incidents may be handled through EPA's exercise of enforcement discretion. Compare Marathon Oil Co. v. EPA, 564 F.2d 1253 (9th Cir.1977), with Weyerhaeuser v. Costle, 594 F.2d 1223 (8th Cir. 1979). See also Sierra Club v. Union Oil Co., 813 F.2d 1480 (9th Cir. 1987), American Petroleum Institute v. EPA, 540 F.2d 1023 (10th Cir. 1976), CPC International, Inc. v. Train, 540 F.2d 1320 (8th Cir. 1976), and FMC Corp. v. Train, 539 F.2d 973 (4th Cir. 1976).

A bypass, on the other hand, is an act of intentional noncompliance during which waste treatment facilities are circumvented because of an emergency situation. EPA has in the past included bypass provisions in NPDES permits. EPA has determined that both upset and bypass provisions should be included in NPDES permits and has promulgated permit regulations that include upset and

bypass permit provisions. See 40 CFR 122.41. The upset provision establishes an upset as an affirmative defense to prosecution for violation of, among other requirements, technology-based effluent limitations. The bypass provision authorizes bypassing to prevent loss of life, personal injury, or severe property damage. Consequently, although permittees in the offshore oil and gas industry will be entitled to upset and bypass provisions in NPDES permits, this regulation does not address these issues. 12502

G. How Would an Applicant Apply for Variances and Modifications to Today's Proposed Regulation?

Once this regulation is in effect, the effluent limitations must be applied in all NPDES permits thereafter issued to discharges covered under this effluent limitations guideline subcategory. The CWA, however, provides certain variances from BAT and BCT limitations. Under 301(l), the only variance available for discharges from the production area is an FDF variance under 301(m). For the land application area, 301(g) variances don't apply because EPA is not setting BAT effluent limitations for the five pollutants to which that provision applies. 301(c) and FDF variances are available for effluent limitations covering the land application area.

The Fundamentally Different Factors (FDF) variance considers those facility specific factors which a permittee may consider to be uniquely different from those considered in the formulation of an effluent guideline as to make the limitations inapplicable. An FDF variance must be based only on information submitted to EPA during the rulemaking establishing the effluent limitations from which the variance is being requested, or on information the applicant did not have a reasonable opportunity to submit during the rulemaking process for these effluent limitations guidelines. If fundamentally different factors are determined, by the permitting authority (or EPA), to exist, the alternative effluent limitations for the petitioner must be no less stringent than those justified by the fundamental difference from those facilities considered in the formulation of the specific effluent limitations guideline of concern. The alternative effluent limitation, if deemed appropriate, must not result in non-water quality environmental impacts significantly greater than those accepted by EPA in the promulgation of the effluent limitations guideline. FDF variance requests with all supporting information and data must be received by the permitting authority within 180 days of publication of the final effluent limitations guideline (Publication date here). The specific regulations covering the requirements for and the administration of FDF variances are found at 40 CFR 122.21(m)(1), and 40 CFR part 125, subpart D.