

dry systems similarly to chicken operations (e.g., at the time of the NODA, EPA was considering 100,000 ducks would have constituted a Large CAFO). Another option would establish a Large CAFO threshold of 30,000 ducks based on the quantity and content of duck manure, using data and recommendations supplied by Purdue University. In all cases, the threshold for Large CAFOs with wet systems would remain at 5,000 ducks.

*What were the key comments?* A number of commenters on both the proposal and the NODA from duck industry associations, individual duck operations and some States requested that EPA change the threshold in the CAFO definition for ducks. They urged EPA to consider revising the duck thresholds to a higher number. By retaining the 5,000 duck threshold, they noted, essentially all duck operations in the United States would be required to apply for an NPDES permit. Commenters noted that management practices have changed significantly since the 5,000 duck threshold was established. The management practices currently used to raise ducks are similar to chicken operations. Commenters claim that these dry facilities should be regulated like chicken operations, basing the threshold either on phosphorus manure levels or using a threshold similar to chickens. State commenters agree that the threshold for these types of facilities should be raised but suggest retaining the existing threshold for wet systems.

*Rationale.* The existing NPDES regulation and the effluent guideline make no distinction between dry and wet systems. The duck thresholds were originally established in the 1970s and were based primarily on ducks being raised outside on ponds or with a stream running through an open lot. These types of facilities have been referred to as "wet" lot operations. Today's regulation refers to them as AFOs that use liquid manure handling systems. This preamble also refers to them as "wet systems." For purposes of today's rulemaking, these include duck operations that use ponds, wet lots, or buildings with lagoons.

EPA agrees with commenters that the management practices more typically used today to raise ducks are similar to chicken operations where the birds are confined to a building on solid bedding or in a building with a concrete pit underneath it where manure collects. These types of facilities have been referred to as "dry lot" operations. Where these practices are utilized, and are not combined with liquid manure handling systems, such as lagoons, they

present much less risk of a discharge than do wet systems. Today's regulation refers to them as AFOs that use "other than liquid manure handling systems." This preamble also refers to them as "dry systems."

After examining information concerning the current technologies of the duck industry, EPA concurs that it is appropriate to adjust the regulatory thresholds for dry systems, while retaining the existing threshold for wet systems. EPA is setting the Large CAFO threshold for duck operations with dry systems at 30,000 birds or more based on data produced by Purdue University and the American Society of Agriculture Engineers (ASAE), which are available in the administrative record. This threshold was calculated using phosphorus manure levels and assuming an approximate 3 duck to 1 chicken ratio. The medium size threshold is 10,000 to 29,999 ducks and the small threshold is less than 10,000 ducks. These thresholds were set at these levels based on the same 3 duck to 1 chicken ratio. Data on both layer and broiler chickens were averaged to obtain this ratio. This threshold is generally consistent with the thresholds adopted in current State programs, especially Indiana where the majority of the duck operations are located. This decision is also consistent with today's final decision on the chicken threshold, where EPA has established higher thresholds for layer operations using other than liquid manure handling systems than for layer operations using liquid manure handling systems.

*e. Cow/Calf.* In today's final rule, a beef cow/calf pair counts as one animal when temporarily confined in a pen, lot, barn, or stable. However, a cow/calf pair counts as two animals after the offspring are weaned.

*What did EPA propose?* The proposed rule did not discuss a convention to count cow/calf pairs. In response to comments from the beef industry, EPA described a convention in the November 2001 NODA to count a cow/calf pair as one animal for 120 days after the calf is weaned, after which they would be considered two animals.

*What were the key comments?* Comments on the proposal from organizations and individuals representing the beef sector indicated that they thought the proposal would alter the way mature and immature beef cow pairs are counted. They commented that if a cow/calf pair was counted as two animals, the proposed rule would have a significant impact on small beef operations that are largely pasture-based. Environmental organizations

generally did not comment on this issue.

In comments on the 2001 Notice, States and industry commenters unanimously supported the proposal to explicitly count a cow/calf pair as one animal. Many commenters said that, in practice, producers think of the cow and calf as a single entity until weaning time when the young animal becomes physically separated and requires separate penning and housing, and suggested adopting this standard. Some commenters suggested other alternatives, such as counting a cow/calf pair as 1.2 animal units, or differentiating the AU equivalent based on the age of the calves (e.g., up to two months old the cow/calf would be counted as one animal unit, from two to six months calves would be counted as 0.3, from six months to a year counted as 0.6, etc.).

*Rationale.* As described in the 2001 Notice, EPA has always assumed that cow/calf operations are typically pasture-based and would not normally fall within the coverage of the CAFO regulations. Such operations typically confine animals only temporarily for birthing, veterinary care, or other purposes. This temporary confinement may result in the operation being defined as an AFO, in which case it could in turn be defined as a CAFO should it meet certain conditions. However, it is not likely that this temporary confinement would involve enough animals to define the operation as a CAFO. EPA would like to make it clear that it is still not the Agency's intention to regulate pasture-based or rangeland operations. Counting a cow/calf pair as one animal is consistent with how EPA treats mother/offspring pairs housed together at the same location in other sectors (e.g., dairy and swine).

After considering public comment, EPA determined that it was appropriate to consider a cow/calf pair as one animal until the calf is weaned, rather than to specify a particular time period after weaning, which would have entailed additional, potentially burdensome, record keeping requirements (e.g. date of weaning for each calf).

*f. Eliminate the mixed animal calculation.* With today's final rulemaking, EPA is eliminating the formula for calculating whether an AFO is a CAFO because of the accumulation of several different animal types in confinement at one facility. An AFO is defined as a CAFO only if the specific threshold for any one animal sector covered by today's final regulations is met. Once a given operation is defined