DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 205

[Document Number AMS–NOP–15–0012; NOP–15–06FR]

RIN 0581–AD44

National Organic Program (NOP); Organic Livestock and Poultry Practices

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: The United States Department of Agriculture's (USDA) Agricultural Marketing Service (AMS) is amending the organic livestock and poultry production requirements by adding new provisions for livestock handling and transport for slaughter and avian living conditions; and expanding and clarifying existing requirements covering livestock care and production practices and mammalian living conditions.

DATES: *Effective Date:* This rule becomes effective March 20, 2017.

Implementation Dates: This rule will be fully implemented March 20, 2018. There are two exceptions:

(1) Organic egg operations that are certified before March 20, 2020 need to implement the outdoor access requirements by March 21, 2022. Organic egg operations that become certified after March 20, 2020 need to comply with the outdoor access requirements in order to obtain certification.

(2) Organic broiler operations must fully implement the indoor space requirements by March 20, 2020.

FOR FURTHER INFORMATION CONTACT: Paul Lewis, Ph.D., Director of Standards Division, Telephone: (202) 720–3252; Fax: (202) 260–9151.

SUPPLEMENTARY INFORMATION:

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I. Executive Summary

A. Purpose of the Final Rule

This final rule creates greater consistency in organic livestock and poultry practice standards. Based on recommendations from the Office of Inspector General and the National Organic Standards Board, AMS determined that the current USDA organic regulations (7 CFR part 205) covering livestock care and production practices and living conditions needed additional specificity and clarity to better ensure consistent compliance by certified organic operations and to provide for more effective administration of the National Organic Program (NOP) by AMS. One purpose of the Organic Foods Production Act of 1990 (OFPA) (7 U.S.C. 6501–6522) is to assure consumers that organically produced products meet a consistent and uniform standard (7 U.S.C. 6501).

B. Summary of Provisions

Specifically, this final rule:

1. Clarifies how producers and handlers participating in the NOP must treat livestock and poultry to ensure their wellbeing.

2. Clarifies when and how certain physical alterations may be performed on organic livestock and poultry in order to minimize stress. Additionally, some forms of physical alterations are prohibited.

3. Sets maximum indoor and outdoor stocking densities for organic chickens, which vary depending on the type of production and stage of life.

4. Defines outdoor space and requires that outdoor spaces for organic poultry include soil and vegetation.

5. Adds new requirements for transporting organic livestock and poultry to sale or slaughter.

6. Clarifies the application of USDA Food Safety and Inspection Service (FSIS) requirements regarding the handling of livestock and poultry in connection with slaughter to certified organic livestock and poultry establishments and provides for the enforcement of USDA organic regulations based on FSIS inspection findings.

7. AMS has only established indoor space requirements for chickens in this final rule. AMS may propose space requirements for other avian species in the future. Other avian species must meet all other indoor requirements including exit doors, ammonia levels, and lighting.

C. Costs and Benefits

AMS estimates the following costs and benefits for this final rule.

Assumed conditions	Affected population	Costs, millions [a]	Benefits, millions	Transfers, millions
All producers remain in organic market; Organic layer and broiler populations continue historical growth rates after rule.	Organic layer and organic broiler production at full implementation of rule, i.e., 2022 for layers; 2020 for broilers.	$28.7–$31.0	$16.3–$49.5	N/A
50% of organic layer production in year 6 (2022), moves to the cage-free market. Organic layer and broiler populations continue historical growth rates after rule.	Organic layer and organic broiler production at full implementation of rule, i.e., 2022 for layers; 2020 for broilers.	$11.7–$12.0	$4.5–$13.8	$79.5–$86.3

Assumed conditions	Affected population	Costs, millions [a]	Benefits, millions	Transfers, millions
50% of current organic layer production moves to the cage-free market in year 6 (2022). There are no new entrants after publication of this rule that cannot comply.	Current organic layer production; organic broiler production at full implementation of rule in 2020.	$8.2	$4.1–$12.4	$45.6–$49.5
Other impacts: Estimated paperwork burden: $3.9 million				

[a] All values in the costs, benefits and transfer columns of this table are annualized and discounted at 3% and 7% rates.

II. General Information

A. Does this action apply to me?

You may be affected by this action if you are engaged in the meat, egg, poultry, dairy, or animal fiber industries. Affected entities may include, but are not limited to:

- Individuals or business entities that are considering organic certification for a new or existing livestock farm or slaughter facility.
- Existing livestock farms and slaughter facilities that are currently certified organic under the USDA organic regulations.
- Certifying agents accredited by USDA to certify organic livestock operations and organic livestock handling operations.

This listing is not intended to be exhaustive, but identifies key entities likely to be affected by this action. Other types of entities could also be affected. To determine whether you or your business may be affected by this action, you should carefully examine the regulatory text. If you have questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

III Background

This final rule addresses care and production practices, transport, slaughter, and living conditions for organic livestock and poultry.[1] The provisions in this rule on outdoor access for organic poultry have a significant history of AMS actions that are based on National Organic Standards Board (the NOSB) recommendations. Outdoor access is a prominent issue in this final rule. Poultry practices for outdoor access currently vary, especially practices implemented for layer operations. Some organic poultry operations provide large, open-air outdoor areas, while other operations provide minimal outdoor space or use screened and covered enclosures commonly called ''porches'' to meet outdoor access requirements. In a 2010 audit, the USDA Office of Inspector General identified inconsistencies in how accredited certifying agents (or ''certifiers'') consider porches under outdoor access while implementing certification of organic poultry operations. AMS initially responded to this audit finding by publishing draft guidance on outdoor access for organic poultry. However, after receiving public comment on the draft guidance, AMS determined that rulemaking was necessary to reduce the variation in outdoor access practices for organic poultry; therefore, AMS did not finalize the draft guidance. To assist with this rulemaking, the NOSB developed a series of recommendations to further clarify organic livestock and poultry care and production practices, transport, slaughter, and living conditions, including outdoor access for poultry. The NOSB deliberations on these recommendations revealed that there is considerable support for these recommendations within the organic community and consumers have specific expectations for organic livestock care, which includes outdoor access for poultry.

On April 13, 2016 AMS issued a proposed rule to amend organic livestock and poultry practices. Background on current organic livestock standards, NOSB recommendations contributing toward the development of the proposed rule, AMS policy, and related issues are described in preamble of that action.[2]

IV. Comments Received

In response to AMS's request for comments on the proposed rule, a total of 6,675 written comments were received. Approximately 78 percent of the submitted comments—or 5,182 comments—consisted of form letters. There were 1,493 individual comments on the proposed rule. Comments were received from producers, producer associations, handlers, certifying agents, consumers and consumer groups, animal welfare organizations, veterinarians, state government agencies, foreign government agencies, and trade associations or organizations. AMS analysis and response to comments is described in the following preamble sections of the final rule.

A. Regulatory Authority of the Final Rule

(Comment) Several comments argued that USDA does not have sufficient regulatory authority under OFPA to publish final rules for livestock living conditions and animal welfare as described in the proposed rule. They argued that the livestock section of OFPA only provides authority to prepare regulations regarding feeds and animal health care issues.

(Response) AMS affirms that USDA has the authority to conduct this rulemaking; this action falls within our purview to implement the Organic Foods Production Act. AMS is issuing these regulations to strengthen the USDA organic livestock production regulations with clear provisions to fulfill one purpose of OFPA: to assure consumers that organically-produced products meet a consistent and uniform standard (7 U.S.C. 6501). In accordance with OFPA, this action will clarify USDA statutory and regulatory mandates and establish consistent, transparent, and enforceable requirements. Two provisions within OFPA convey the intent for the USDA to develop more specific standards for organic livestock production; that purpose was also explained in the accompanying Senate Committee report.[3] Section 6509(d)(2) authorizes

[1] As defined in § 205.2, the term ''livestock'' includes any cattle, sheep, goats, swine, poultry, or equine animals used for food or in the production of food, fiber, feed, or other agricultural-based consumer products. In this final rule, the terms ''livestock'' and ''livestock and poultry'' are used throughout the preamble. Unless otherwise specified, the term ''livestock'' refers to both mammalian livestock and avian livestock.

[2] *https://www.federalregister.gov/documents/2016/04/13/2016–08023/national-organic-program-organic-livestock-and-poultry-practices.*

[3] The Senate report that accompanied the OFPA legislation set the expectation for greater specificity in the future for organic livestock standards as the industry matured: ''More detailed standards are enumerated for crop production than for livestock production. This reflects the extent of knowledge and consensus on appropriate organic crop production methods and materials. With additional research and as more producers enter into organic livestock production, the Committee expects that USDA, with the assistance of the National Organic Standards Board will elaborate on livestock

Continued

the NOSB to recommend standards in addition to the OFPA provisions for livestock health care to ensure that livestock is organically produced. Further, section 6509(g) directs the Secretary to develop detailed regulations through notice and comment rulemaking to implement livestock production standards. AMS has already exercised this authority to implement additional regulations regarding feed and living conditions for organic livestock (see Access to Pasture, 75 FR 7154 (February 17, 2010)). Therefore, the statute contemplated that the assurance of organic integrity for livestock products would require more specific guidelines and provided the authority for that future regulatory activity.

This rule would continue the process initiated with the Access to Pasture rulemaking to establish clear and comprehensive requirements for all organic livestock, consistent with recommendations provided by USDA's Office of Inspector General and nine separate recommendations from the NOSB. Further, it will align regulatory language and intent to enable producers and consumers to readily discern the required practices for organic poultry production and to differentiate the products in the marketplace.

B. Regulatory Clarity of the Final Rule

(Comment) The proposed rule sought comments on the clarity of the proposed requirements by posing the following specific question: ''Can farmers, handlers, and certifying agents readily determine how to comply with the proposed regulations?''

Though they did not directly answer the question posed in the proposed rule, a few comments nevertheless commented more generally on the clarity of the proposed rule. Speaking specifically of the revisions to mammalian living conditions, one comment indicated that the proposed rule was needed as a means to strengthen vague organic livestock standards. This comment did, however, highlight areas that continue to be unclear, claiming inconsistencies in the interpretation of standards upon implementation of the rule. Another commenter provided general support for the proposed rule, as rulemaking clarity will lead to consistent compliance by certified operations while addressing consumer expectations and demand. In contrast, one comment stated that that rule is confusing specifically addressing mammals and avian species. Another comment stated that only organic certifiers with limited livestock experience will find the current the organic regulations clear and concise in contrast to the more seasoned organic inspector community. This commenter further stated that those experienced in the organic industry realize the challenge to promulgate universal standards. The comment also asserted that creating new standards will make it difficult for certifiers to be effective in their work.

(Response) Where appropriate, AMS has amended sections of the final rule to clarify the requirements based on comments, with the goal of making the requirements readily understandable for organic stakeholders.

C. Consumer Education and Outreach

(Comment) A few comments stated that USDA should do more to inform consumers about what organic means and doesn't mean, and that educating consumers about the existing standards would be better than changing the regulations.

(Response) AMS agrees that consumer education is important to ensure that organic consumers understand the limitations of the existing organic regulations. However, numerous comments and the NOSB have requested that AMS clarify the current regulatory text and add sufficient detail in support of consistent enforcement of the USDA organic regulations that affect the welfare of organic livestock and poultry. Therefore, AMS has opted to proceed with this rulemaking. AMS received a number of comments which addressed how the variability in outdoor access practices among organic producers threatens consumer confidence in the organic label. This is discussed more fully in the Executive Orders 12866 and 13563 section—see Impact of Consumer Confusion.

D. International Trade Agreements

(Comment) A number of comments asked how the final rule would impact existing organic trade agreements, such as equivalency agreements and recognition agreements. For example, some comments highlighted where specific standards in the proposed rule differ from existing standards in specific countries. It was also asked whether existing equivalency agreements would require renegotiation as a result of a final rule.

(Response) When the USDA organic regulations are amended, the USDA notifies the trading partner in accordance with the terms established in the international organic equivalency arrangement. In addition, the proposed regulations are shared with the World Trade Obligations (WTO) pursuant to the WTO Agreement on Technical Barriers to Trade. Under the current organic equivalency arrangements, the USDA notifies the trading partner in advance of any final USDA organic regulation that may affect the terms of the existing equivalency determination. The foreign country reviews the information, and may initiate discussion to determine whether a renegotiation of the equivalence arrangement is needed. With recognition arrangements, the certification bodies in the foreign country are accredited by the recognized foreign government authority to certify operations under the USDA organic regulations. As a result, the USDA notifies the foreign government of the final USDA organic regulation, and the foreign government authority informs its accredited certification bodies of the final regulation. AMS will provide training and technical assistance during the implementation period to assist foreign governments and accredited certification bodies.

E. Meat and Poultry Imports

(Comment) USDA received comments regarding meat and poultry imports and how AMS will regulate livestock slaughter by certified operations in foreign countries. One comment provided country-specific recommendations regarding cattle to stipulate that while cattle are in Australia, ''they must abide by the standards and guidelines prescribed in the Australian Animal Welfare Standards for the Land Transport of Livestock (The Standards).'' Additionally, a comment indicated that U.S. certifiers are currently unequipped to verify compliance with these other rules/laws for producers outside of the U.S.

(Response) Products certified under the USDA organic regulations must first comply with the requirements of the Food and Drug Administration (FDA) and Food Safety and Inspection Service (FSIS). In other countries, FSIS has memorandums of understanding that recognize other countries' processes for safe and humane livestock handling and slaughter. Generally, USDA organic requirements go beyond minimum regulatory requirements for humane handling and slaughter. For NOP requirements, certifiers must ensure inspectors are qualified to evaluate compliance of applicants for organic certification. Certifiers are not responsible for verifying compliance

criteria.'' Senate Committee on Agriculture, Forestry and Nutrition, *Report of the Committee on Agriculture, Forestry and Nutrition to Accompany S. 2830 Together with Additional and Minority Views, 101st Congress,* S. REP. NO. 101–357, at 289 (1990).

with regulations other than those for organic certification. AMS did not amend the proposed rule based on these comments.

V. Related Documents

Documents related to this final rule include the Organic Foods Production Act of 1990, as amended, (7 U.S.C. 6501–6522) and its implementing regulations (7 CFR part 205). The NOSB deliberated and made the recommendations described in this proposal at public meetings announced in the following **Federal Register** Notices: 67 FR 19375 (April 19, 2002); 74 FR 46411 (September 9, 2009); 75 FR 57194 (September 20, 2010); and 76 FR 62336 (October 7, 2011). NOSB meetings are open to the public and allow for public participation.

AMS published a series of past proposed rules that addressed, in part, the organic livestock requirements at: 62 FR 65850 (December 16, 1997); 65 FR 13512 (March 13, 2000); 71 FR 24820 (April 27, 2006); and 73 FR 63584 (October 24, 2008). Past final rules relevant to this topic were published at: 65 FR 80548 (December 21, 2000); 71 FR 32803 (June 7, 2006); and 75 FR 7154 (February 17, 2010). AMS published the most recent proposed rule at 81 FR 21956 (April 13, 2016).

VI. Definitions (§ 205.2)

A. Description of Regulations

1. Summary of the Final Rule

This final rule adds sixteen new terms to § 205.2: beak trimming, caponization, cattle wattling, de-beaking, de-snooding, dubbing, indoors or indoor space, mulesing, non-ambulatory, outdoors or outdoor space, perch, pullet, ritual slaughter, soil, toe clipping, and vegetation. Six of these terms—caponization, cattle wattling, de-snooding, dubbing, mulesing, and soil—remain unchanged from the proposed rule. The definitions of seven additional terms were revised in response to comments: beak trimming, de-beaking, indoors or indoor space, outdoors or outdoor space, perch, pullets, and toe clipping. The term roost, which was included in the proposed rule, has been removed from the final rule in response to comments. Three terms that were not included in the proposed rule, non-ambulatory, ritual slaughter, and vegetation, have been added to the final rule.

Physical Alterations

The final rule prohibits several physical alterations on organic livestock. Eight terms related to these physical alterations are defined in the final rule so that certifying agents and producers may ensure that they do not inadvertently perform a prohibited physical alteration which may be known by a different name locally.

Indoors or Indoor Space

The final rule defines ''indoors or indoor space'' as the space inside of an enclosed building or housing structure that has a solid, slatted, or perforated floor. The term ''indoors'' from the proposed rule was modified to include ''or indoor space'' because both of these terms are used interchangeably throughout the rule. While all organic livestock must be provided with species-appropriate shelter, structures providing indoor space are not required. If indoor spaces are provided to organic livestock, then species-specific requirements for the indoor space must be met. Indoor spaces are differentiated from outdoor spaces based upon the structure being enclosed so that livestock may be confined within the footprint of the building.

Indoor space is enclosed so that livestock may be confined within the building or housing structure; outdoor space is the area outside of the enclosed building or enclosed housing structure, but includes roofed areas that are not enclosed. One of the key considerations distinguishing indoor space from outdoor space is how the livestock are managed in that space. How livestock are managed may determine whether space is considered indoors, outdoors, or neither indoors nor outdoors. As an example, a screened in and roofed porch to which the (enclosed) birds always have access, including during temporary confinement events, would be considered indoor space. That same porch would be considered neither indoors nor outdoors if the birds did not have continuous access to the space during temporary confinement events. If the screens were removed from that porch so that the birds could freely access other outdoor space, then the porch would be considered outdoor space (see ''Outdoors or outdoor space,'' below). These distinctions provide flexibility for producers to work with their certifying agents when developing their organic system plans (OSPs), yet still aligns with the position that enclosed porches are not considered to be outdoor space.

The final rule defines four types of avian indoor space. These indoor housing types are defined because each housing type has a differing indoor space requirement. AMS continues to include an indoor space requirement at § 205.241(b)(8)(v) for housing that does not fit within one of the types defined in § 205.2.

The final rule further clarifies the requirements for avian species indoor space requirements by defining the term ''perch'' as a rod or branch type structure or flat space above the floor of the house that accommodates roosting, allowing birds to utilize vertical space in the house.

Outdoors or Outdoor Space

The final rule defines ''outdoors or outdoor space'' to clarify the meaning of outdoor areas for mammalian and avian species. The term ''outdoors'' from the proposed rule was modified to include ''or outdoor space'' because these two terms are used interchangeably throughout the rule. ''Outdoors or outdoor space'' is defined as any area outside of an enclosed building or enclosed housing structure, but including roofed areas that are not enclosed. In this definition, ''outdoors or outdoor space'' includes all of the non-enclosed space encompassing soil-based areas such as pastures, pens, or sacrifice lots; hardened surface areas such as feedlots, walkways, or loafing sheds; and areas providing outdoor shelter such as windbreaks and shade structures.

The outdoor space has species-specific requirements. For example, this rule sets the requirement that 50 percent of the outdoor space for avian species must be soil-based and that the soil be maximally covered with vegetation. Vegetative cover must be maintained in a manner that does not provide harborage for rodents and other pests. For avian species, the definition of outdoors has been revised to include pasture pens, which are floorless pens that are moved regularly and provide direct access to soil and vegetation. These pens may consist of solid roofing over all or part of the pen to provide shelter for the birds. For further discussion see ''Pasture Pens vs. Other Mobile Housing'' in section IX. Avian Living Conditions.

To assist with the mitigation of biosecurity and predation risks, fencing, netting, or other materials are permitted over all or part of the outdoor areas to prevent predators and other wild birds from entering the outdoor area. Many producers also use portable or permanent shade structures throughout their pastures. Structures for shade are also permitted in the outdoor space. For example, the area within a standalone, roofed shade structure could be included as outdoor space area. Areas under the eaves or the awning of a building, with a roof attached to the outer wall of the indoor space structure,

can also be considered outdoors. While these areas may have solid roofs overhead, they can offer the same quality of outdoor space as uncovered outdoor areas, including natural ventilation/open air, direct sunlight, soil, vegetation, and open access to uncovered areas beyond.

The final rule defines ''soil'' as the outermost layer of the earth comprised of minerals, water, air, organic matter, fungi, and bacteria, in which plants may grow roots. Soil is defined to distinguish these areas from impervious areas such as concrete or pavement. Soil may consist of bare ground but is generally covered with vegetation. As described in the mammalian and avian living condition sections, maximum vegetative cover should be maintained on the soil as appropriate for the species, season, geography, and climate. Designated sacrifice areas or dry lots are permitted. Outdoor areas must be maintained in a manner that maintains or improves natural resources, including soil and water quality. Temporary confinement may be provided to protect soil and water quality.

Non-Ambulatory

The final rule adds the term ''non-ambulatory'' and references the definition in 9 CFR 309.2(b). FSIS defines non-ambulatory as ''livestock that cannot rise from a recumbent position or that cannot walk, including, but not limited to, those with broken appendages, severed tendons or ligaments, nerve paralysis, fractured vertebral column, or metabolic conditions.'' Any non-ambulatory livestock on organic farms must be medically treated, even if the treatment causes the livestock to lose organic status or be humanely euthanized.

Pullets

AMS modified the definition of pullets, which is used by the AMS Livestock, Poultry, and Seed Program, to include species other than chickens. This final rule defines ''pullets'' as female chickens or other avian species being raised for egg production that have not yet started to lay eggs. Once avian females begin laying eggs, AMS refers to them as layers. The term ''pullets'' does not describe young broilers used for meat production.

Stocking Density

The final rule defines ''stocking density'' as the weight of animals on a given area or unit of land. This term is used to describe the indoor and outdoor space requirements for organic livestock. For example, the final rule establishes maximum stocking densities for avian species, and the producer must ensure that the area provided is large enough to not exceed the established maximum stocking density when all birds in the flock are on the given area (*i.e.,* indoors) or unit of land.

Ritual Slaughter

The final rule adds the term ''ritual slaughter'' and references the definition in the Humane Methods of Slaughter Act (7 U.S.C. 1902(b)). This Act defines ritual slaughter as ''slaughtering in accordance with the ritual requirements of the Jewish faith or any other religious faith that prescribes a method of slaughter whereby the animal suffers loss of consciousness by anemia of the brain caused by the simultaneous and instantaneous severance of the carotid arteries with a sharp instrument and handling in connection with such slaughtering.''

Organic livestock and handling operations may use ritual slaughter to convert their livestock to meat or poultry without loss of organic status.

Vegetation

The final rule adds the term ''vegetation'' and defines it as living plant matter that is anchored in the soil by roots and provides ground cover. This term applies to the requirement for vegetation in outdoor areas, which is central to protecting soil and water quality as well as providing for livestock to exhibit their natural behaviors. The roots of vegetation provide stability and structure to soil. Vegetation helps water soak into the soil rather than running off, which can cause erosion. Livestock also have natural behaviors of grazing, rooting, nesting, etc., which require vegetation.

B. Discussion of Comments Received

1. Definition of Beak Trimming

(Comment) The term beak trimming was included in the proposed rule and was defined as the removal of the curved tip of the beak. Many comments expressed that the definition for this term was vague and that the difference between beak trimming and de-beaking was unclear. Comments also shared that it is common within the industry to use the terms beak trimming and de-beaking interchangeably and that a more quantitative measure should be included if the intent of the rule is to control the amount of beak trimmed. One comment requested additional clarification with regards to trimming the bottom of the beak. Some comments suggested revisions to the definition to provide clarity, including the American Veterinary Medical Association (AVMA) which recommended the following definition: ''Beak trimming (formerly de-beaking) is the removal of approximately one-quarter to one-third of the upper beak, or both upper and lower beak, of a bird in order to control injurious pecking and cannibalism.'' Four comments suggested that the proposed definition be revised to specify the anatomical name of the portion of the beak that is removed in beak trimming. Other comments stated that the definition should specify the age at which beak trimming can be performed.

(Response) AMS agrees with the majority of comments which expressed that the definition of beak trimming should be clarified. We have replaced the definition from the proposed rule with a definition similar to the one provided by AMVA which specifies that beak trimming is ''the removal of approximately one-quarter to one-third of the upper beak, or both upper and lower beak''. For the purposes of these regulations, AMS modified the AVMA definition to replace the word ''approximately'' with ''not more than'' in order to ensure that beak trimming is clearly distinguished from de-beaking. We believe that this definition adequately addresses the comments received and is both accurate and clear without being overly prescriptive. AMS does not believe that it is necessary to refer to anatomical names for portions of the beak in this definition since these terms are not used in the regulatory text. Other comments in response to the age at which beak trimming can be done are addressed in the avian living conditions section of the final rule.

2. Definition of De-Beaking

(Comment) The term de-beaking was included in the proposed rule and was defined as ''the removal of more than the beak tip.'' The comments received regarding the term beak trimming also addressed de-beaking, expressing that the proposed definition was vague and that the distinction between beak trimming and de-beaking was not clear. One comment requested that the definition of de-beaking be removed entirely as the industry has taken steps to eliminate this practice.

(Response) In response to comments, AMS amended the definition of de-beaking in the final rule to make it more specific. AMS believes that it is important to define de-beaking in order to differentiate it from beak trimming. Comments did not provide a suggested definition for the term, and as a result AMS decided to define de-beaking as anything that goes beyond what is defined in this rule as beak trimming.

Thus, the amended definition of de-beaking clarifies that it is the removal of more than one-third of the upper beak, or more than one-third of both the upper and lower beaks of a bird.

3. Definition of Caponization

(Comment) AMS received two comments stating that the definition for ''caponization'' should not be included in the final rule. Comments stated that it is unnecessary for AMS to define ''caponization'' because it beyond the purview of the AMS.

(Response) This final rule prohibits caponization, as defined, based upon a recommendation from the NOSB. Thus, it is within AMS's purview. AMS believes that, because caponization is prohibited, it is necessary to clearly define what it is so that certifying agents and producers can ensure that they do not inadvertently perform this physical alteration.

4. Definition of Indoors

(Comment) AMS received a range of comments on the proposed definition of indoors. A number of comments suggested that the term ''indoors'' be replaced by the term ''indoors for avian species'' since the definition of the term is specifically related to avian living spaces. Other comments recommended changing the term ''pasture housing'' to ''mobile housing.'' These comments pointed out that there are fixed housing systems that offer pasture to birds. They also noted that the term ''pasture-raised'' is defined by other third-party animal welfare standards, and those standards allow fixed housing to be used in combination with a spoke-and-wheel pasture rotation for pasture-raised poultry. Thus, they felt that the term ''mobile housing'' is more accurate based on the type of housing that AMS intended to describe in the proposed definition.

Two comments recommended that the reference to 70% perforated flooring be removed from the description of pasture housing since this requirement is restrictive when considering that different types of pasture housing (or mobile housing) vary in design. These comments suggested that the definition instead focus on the mobility of the housing and its frequent movement.

Various comments expressed that more clarity is needed in the definition of ''indoors'' in order to define exactly what counts as indoors and outdoors for the various types of pasture-based systems used. These comments recommended that definitions for ''moveable pasture pen'' and ''day range system'' be added in order to provide additional clarity and to better represent the actual types of pasture housing used in pastured-poultry operations. Commenters used ''Salatin'' style housing, ''Prairie Schooners,'' and simple hoop structures as examples of moveable pasture pens. The comments described these systems as providing direct access to soil and vegetation; having walls and roofs made of mesh, plastic, wood, and other materials; and having mobility. Birds in these systems are on pasture 24 hours per day, while roofing on all or part of the structure provides shade and protection. These commenters argued that these systems are unique, provide access to the soil and vegetation, and allow birds to exhibit natural behavior, and should be specifically permitted and addressed in the requirements.

(Response) AMS agrees that the proposed definition for indoors focuses specifically on describing what qualifies as indoor areas for avian species. Rather than creating a new term, ''indoors for avian species,'' AMS determined that it would be best to define indoors more broadly, and provide a separate sub-category of terms that define what is indoors specifically for avian species. Having a broadly applicable definition of indoors helps to clearly distinguish it from the meaning of outdoors. Further defining indoor areas for avian species within the definition of indoors allows AMS to provide more specificity where it is needed. As a result, AMS revised the basic definition of indoors to define it as the space inside of an enclosed building or housing structure with solid, slatted, or perforated flooring.

AMS also agrees with comment that stated that the term ''mobile housing'' is more appropriate to describe pasture housing that is regularly moved to provide birds with access to new pasture. In various situations, the term ''pasture housing'' may be applied to stationary housing that provides access to pasture, and this could cause confusion for producers, certifying agents, and inspectors. In response to comments, AMS replaced the term ''pasture housing'' with ''mobile housing'' in the final rule.

Additionally, AMS removed the reference to 70% perforated flooring from the definition of mobile housing. AMS agrees with comments that defining mobile housing without specifying what its flooring is made of is more applicable given the diversity of structures used in mobile housing systems.

AMS made several revisions in the final rule in response to comments requesting more clarity around the definitions of indoors and outdoors as they apply to pasture-based systems. AMS agrees with comments that the proposed definitions for these terms did not adequately consider pastured poultry systems where birds are contained within a lightweight, floorless enclosure such as a pen that provides the birds in the pen with direct contact to soil and vegetation. As such, these systems did not clearly fall under either definition that AMS proposed for indoors or outdoors. AMS has clarified that pasture pens are outdoors or outdoor space by revising the definition in section 205.2. For further discussion of this topic, see section IX. Avian Living Conditions, ''Pasture Pens vs. Other Mobile Housing.''

Organic livestock must be provided with outdoor space as the default living space, along with shelter. Organic producers may choose to provide indoor covered, enclosed and floored space as shelter if needed for the health and wellbeing of the birds, but it is not required. In addition to revising the broad definition of indoors, AMS responded to these comments by providing a separate definition of pasture pens under the definition of outdoors at section 205.2. The definition of outdoors, similar to the definition of indoors, defines pasture pens in a sub-category of terms describing outdoors for avian species.

Nest Box Areas and Other Indoors Comments

(Comment) A small number of comments stated that it was unclear from the proposed rule whether accessible nest box areas could be included in indoor space calculations. These comments suggested adding ''and accessible nest boxes'' to the first sentence of the definition for indoors. Some comments requested that the definition of indoors clarify that the term includes porches and lean-to type structures attached to the building or housing structure. One comment questioned the reference to feed and water on each level in the description of aviary housing. This comment noted that it is not necessary to include this specific requirement in case producers prefer to keep food and water on the main level of housing to encourage birds to move around and go outdoors. One comment suggested a new definition for ''indoors'' as: ''The flat space or platform areas which are under a solid roof and contained within a solid wall.'' Another comment that the definition for indoors specify that it may not contain prohibited materials.

(Response) AMS did not add ''accessible nest boxes'' to the definition of indoors as some comments requested. Most third-party animal welfare

standards consider nest boxes to be distinct from usable floor areas of the house where birds can move around freely. These third-party standards use indoor space calculation methods that do not include nest boxes. AMS believes that aligning with other third-party animal welfare standards by excluding nest boxes from indoor space calculations is the most sensible approach. Since many organic egg producers participate in other third-party verified animal welfare programs, this approach avoids creating separate requirements for producers which could be confusing and burdensome.[4] In addition, AMS' approach aligns with the NOSB's 2011 recommendation stating that nest boxes cannot be included in the calculation of indoor space.[5] Therefore, AMS did not change the definition of ''indoors'' to include nest boxes. AMS also clarified in § 205.241(b)(7) that nest boxes cannot be included in indoor space calculations.

AMS determined that a specific reference to porches and enclosed lean-to type structures is not necessary in the definition of ''indoors.'' AMS believes that the definition adequately covers these types of structures and that including them in a broader list of housing categories would be confusing. However, AMS does provide clarification in the regulatory text under Avian Living Conditions (§ 205.241) that these structures can be counted as indoor space provided that they are fully accessible to birds at all times, including during temporary confinement.

AMS removed ''feed and water on each level'' from the definition of aviary housing in the definition of ''indoors or indoor space'' at § 205.2. Not all avian housing is designed this way, and this revision allows producers to work with their certifying agents to determine the best location for food and water depending on their housing system.

5. Definition of Outdoors

Soil/Vegetation Requirement

(Comment) Many comments stated that the definition of outdoors should include a requirement for vegetation instead of soil. These comments expressed concern about soil and water quality in the absence of vegetation in outdoor areas used by livestock. Many also felt that vegetation is important for animal health and natural behaviors. Other comments requested that the 50 percent soil requirement in the definition of outdoors should be removed. These comments felt that this reference contradicted the use of feeding pads and feeding yards, which are specifically allowed under the rule. They also expressed concern that including a requirement specifically for 50 percent soil in the definition of outdoors could negatively impact soil and water quality during winter or dry months.

Various comments questioned the statement in the proposed definition indicating that areas with solid walls or a solid roof attached to the outer wall of an indoor living space cannot be considered outdoors. Comments questioned how these areas (such as eaves or awnings) are different from an outdoor space that has a solid roof and no walls and is not connected to the structure providing the indoor space. They reasoned that these areas provide the same quality of outdoor space and are important for providing shade and protection. Other comments stated that allowing areas under the eaves of buildings and awnings to be counted as outdoors would simplify outdoor space calculations.

Some comments stated that porches should be included in the definition of outdoors. They cited the need to calculate porches as outdoor space due to producer costs, biosecurity concerns, mortality rates, and environmental concerns.

(Response) AMS agrees with comments that it is important that outdoor areas for livestock include vegetation to protect soil and water quality and promote animal health and natural behaviors. AMS is also in agreement with comments that requested that the reference to soil be removed from the definition of outdoors. In response to these comments, AMS in conjunction with Natural Resource Conservation Service, determined that requirements for soil and vegetation in outdoor access areas should be included in the sections of the final rule that address mammalian and poultry living conditions rather than in the definition of outdoors. Including a requirement for vegetation in the definition for outdoors may make it difficult for some producers to meet outdoor access requirements during certain times of the year (*i.e.* winter months, dry seasons), in certain regions, or for certain species.

AMS agrees that outdoor areas that are partially covered, such as areas under the eaves or the awning of a building, can be considered outdoors. These areas can offer the same qualities of outdoor space (such as natural ventilation, soil, vegetation, and open access to uncovered outdoor areas) as independent shade structures. In response to comments, AMS revised the definition of outdoors to remove the statement that disqualifies areas where there is a solid wall or roof attached to the indoor living space. This revision is intended specifically to accommodate for features of an avian housing structure that may provide cover but are in areas that are truly outdoors. In these areas, birds have access to soil and vegetation, natural ventilation, and open access to uncovered outdoor areas beyond. AMS considers these areas as distinct from porches specifically because they are not fully enclosed.

For further discussion about porches see ''Porches'' in the Discussion of Comments Received, section IX. Avian Living Conditions.

6. Definition of Perch and Roost

(Comment) AMS received a number of comments about the proposed definitions of the terms ''perch'' and ''roost.'' Comments stated that the terms in the proposed rule were confusing and are used interchangeably within the proposed rule and within the industry. Some comments suggested replacing the word roost with the word slats, to refer to raised slats positioned over a manure pit. Other comments stated that the reference to manure pit(s) should be removed from the definition of roost entirely, as not all roosts are located over one.

(Response) AMS recognizes that using both terms ''perch'' and ''roost'' could be confusing, as the terms can be used interchangeably by producers and industry. AMS determined that it is only necessary to include the term ''perch'' in the final rule. As defined, this term is intended to refer to various features in poultry housing, such as rods, branch type structures, and flat roost slats that accommodate roosting and are elevated to allow birds to stay off the floor of the house. Perches may be over a manure pit but this is not a requirement. AMS also removed ''roost'' from the definitions section and regulatory text section based on

[4] United Egg Producers: *http://www.unitedegg.org/information/pdf/UEP-Animal-Welfare-Guidelines2016.pdf.*

Humane Farm Animal Care: *http://certifiedhumane.org/wp-content/uploads/2014/01/Std14.Layers.6A.pdf.*

Global Animal Partnership: *http://gapstaging.blob.core.windows.net/standards/DRAFT%205-Step%20Animal%20Welfare%20Rating%20Pilot%20Standards%20for%20Laying%20Hens.pdf.*

American Humane Certified: *http://www.humaneheartland.org/index.php?option=com_content&view=article&id=3&Itemid=106&jsmallfib=1&dir=JSROOT/Animal+Welfare+Full+Standards+%2B+Supplements.*

[5] NOSB, 2011. Formal Recommendation by the NOSB to the NOP, Animal Welfare and Stocking Rates. Available at: *http://www.ams.usda.gov/rules-regulations/organic/nosb/recommendations.*

comment feedback that the term was not necessary.

7. Definition of Soil

(Comment) A small number of comments expressed confusion over the proposed definition of soil and asked whether soil, as defined, is required to be bare since the definition did not include a reference to vegetation. One of these comments suggested revising the definition to add ''which may be bare or vegetated'' in order to provide clarification. Another comment requested that the definition of soil be revised to describe it as being vegetated, citing soil and water quality concerns. Other comments expressed concern about conflicts with other definitions of soil currently in use. One of these comments suggested replacing the proposed definition of ''soil'' with a more technical definition from the Natural Resources Conservation Service (NRCS), while another comment suggested using the term ''certified ground.'' A separate commenter thought that the impact of the proposed rule was limited without an adequate definition of soil that clearly states the quality, depth, and presence of vegetation.

(Response) After considering the comments received, we have retained the definition of soil from the proposed rule because we believe that it is an accurate and a commonly understood description of the term. AMS believes that a more complex or overly technical definition of soil is unnecessary and could contribute to confusion. However, AMS recognizes that the intent of some comments was to avoid circumstances in which animals on bare soil could create soil or water quality problems, and the Agency agrees that avoiding such an outcome is paramount. The final rule provides additional clarification in the avian and mammalian living conditions sections regarding the various requirements for soil and vegetation in outdoor areas to differentiate between the needs and management of avian and mammalian species.

8. Definition of Stocking Density

(Comment) AMS received various comments identifying that the reference to ''unit of land'' in the definition for stocking density is limiting, since it applies to both outdoor and indoor space. Comments suggested that the definition refer to ''area of space'' instead of to ''unit of land.'' One comment suggested that AMS also remove the phrase ''at any one time'' from the definition of stocking density. The comment stated that this phrase could be interpreted to allow space requirements to be calculated by applying the stocking density to a percentage of animals that might be in an area at a point in time, rather than applying the stocking density to the total flock.

(Response) In the final rule, AMS has removed the phrase ''at any one time'' from the definition to reduce the chance of confusion over the intended meaning and application of the term. AMS has also revised the term to include ''given area'' in response to comments that the term is used for both indoor and outdoor areas.

For further discussion about space calculations, please see AMS's response to comments in Avian Living Conditions.

9. Definition of Toe Clipping

(Comment) AMS received various comments questioning whether toe clipping is the same as toe trimming. Toe clipping was a new term defined and used in the proposed rule. Toe trimming, a similar term, was also used in various places throughout the proposed rule and brought forth questions about interchangeability between the terms.

A number of comments also pointed out that toe clipping can be performed on both male and female birds. These comments said that the definition of the term would be more accurate if the specific reference to a male bird was removed.

(Response) AMS recognizes that the proposed rule defined toe clipping and used the term toe trimming in the proposed rule. AMS also recognizes that toe clipping can be done on both male and female birds. In response to comments, the final rule defines toe clipping as the removal of the nail and distal joint of the back two toes of a bird without reference to the sex of the bird. Additionally, the term ''toe clipping'' is used consistently throughout the final rule and ''toe trimming'' has been removed.

10. Miscellaneous Comments

Scratch Area

Two comments asked for clarification about of the definition and composition of a scratch area. AMS has removed the term ''scratch area'' from the regulatory text. Since the term ''scratch area'' is not included in the regulatory text, AMS sees no need to define the term.

Enrichment/Suitable Enrichment

A small number of comments asked AMS to define the term enrichment or the phrase suitable enrichment. AMS has not defined the term, as we have removed the requirement for suitable enrichment in the final rule. For further discussion, see AMS's response to comments in the section on FDA regulations and food safety.

Willful Acts of Abuse

One comment requested that the rule provide a definition of ''willful acts of abuse.'' The comment noted that this definition was included in the NOSB's 2011 recommendation on transport and slaughter. Since the term ''willful acts of abuse'' is not included in the regulatory text, AMS sees no need to define the term.

Litter

One comment requested that AMS include a definition of litter in the rule. This comment stated that it is unclear if litter is intended to mean bedding or if it can consist solely of dehydrated manure. AMS determined that the term ''litter'' is commonly used by avian producers to describe substrates used to absorb moisture and dilute manure, as well as to provide birds the opportunity to express natural behaviors such as foraging and dust bathing. AMS did not provide a definition for litter in the final rule. Instead, litter is described in more detail in the avian living section of the rule.

Dubbing

Four comments stated that the definition of dubbing does not include the removal of the wattles. AMS reviewed the uses of the term dubbing and found some references that included the removal of wattles and others that only referred to combs. Other sources refer to the practices separately as ''wattle trimming'' and ''comb trimming.'' AMS retained the definition of dubbing in the final rule to include the removal of both combs and wattles.

Swine Aggression

One comment requested that the final rule define ''swine aggression'' to prevent unnecessary confinement of pigs. This commenter stated that without a definition for the term, the provision of the rule allowing for individual housing for swine in cases where aggression is documented could be used for unnecessary confinement of pigs. AMS determined that it would be challenging to develop a definition for ''swine aggression'' that would be applicable across stages of production, and the diverse realities that exist on each farm. Instead, producers should work with their certifying agents to describe the types of aggression that would warrant individual housing on their operation as they develop an OSP.

VII. Livestock Health Care Practices (§ 205.238)

A. Description of Regulations.

1. Summary of the Final Rule

AMS amended current provisions and added new provisions to the organic livestock care and production practice standards. The amendment to § 205.238(a)(2) specifies that the sufficiency of the feed ration be demonstrated by appropriate body condition of the livestock. Livestock producers are required to monitor their animals to ensure body condition is being maintained. In addition, certifying agents need to verify the nutritional adequacy of the animals' diet by assessing the body condition of organic livestock during inspection. Suitable body condition varies between species, between breeds, and between production types; for example, a suitable condition for dairy cattle may be considered too thin in beef cattle. AMS plans to publish guidance to assist certifying agents, inspectors, and producers in assessing body condition for different species.

AMS revised § 205.238(a)(5) to clarify the conditions under which physical alterations may be performed on livestock. Physical alterations may only be performed for an animal's welfare, identification, or safety. Alterations must be done at a reasonably young age with minimal pain or stress to the animal, and may only be performed by a person who can competently perform the procedure. Competency in performing physical alterations may be demonstrated by appropriate training or experience of the person.

A 2009 NOSB recommendation allowed teeth clipping and tail docking in piglets, but this revision was retracted in the 2011 NOSB recommendation. In this final rule, AMS added § 205.238(a)(5)(i), which restricts needle teeth clipping and tail docking in pigs. These two types of physical alterations may not be performed on a routine basis, but may be performed as needed to improve animal welfare, as listed below.

Needle teeth clipping and tail docking in pigs may only be performed in response to documented animal welfare reasons after alternative steps to prevent harm fail. Teeth clipping, if performed, is limited to the top third of each needle tooth. For example, an organic swine producer who clipped needle teeth or performed tail docking would need to document excessive needle teeth scarring on the underline of a sow or piglets, or document tail biting on piglets in the litter. Swine producers would also need to document that alternative methods to prevent scarring had failed. Such alternative methods may include, but are not limited to, cross-fostering prior to teat fidelity across litters to minimize weight variation, providing sufficient enrichment materials, and providing vegetation for rooting.

AMS is finalizing § 205.238(a)(5)(ii) to list the physical alterations that are prohibited in an organic operation. Based on the 2011 NOSB recommendations, the following physical alterations to avian species are prohibited: De-beaking, de-snooding, caponization, dubbing, toe clipping of chickens, toe clipping of turkeys unless with infra-red at hatchery, and beak clipping after 10 days of age. In addition, the following physical alterations to mammalian species are prohibited: Tail docking of cattle, wattling of cattle, face branding of cattle, tail docking of sheep shorter than the distal end of the caudal fold, and mulesing of sheep.

AMS added a new § 205.238(a)(7) which specifies that surgical procedures on livestock to treat an illness must be done in a manner that minimizes pain, stress, and suffering. The NOSB recommended that all surgical procedures for livestock be done with the use of anesthetics, analgesics, and sedatives. USDA organic regulations require that all surgical procedures for treatment of disease be undertaken in a manner that employs best management practices in order to minimize pain, stress, and suffering, and only with the use of anesthetics, analgesics, and sedatives as listed in §§ 205.603(a) and 205.603(b).

AMS added a new § 205.238(a)(8) that requires organic producers to actively monitor and document lameness within the herd or flock. Lameness can be an issue in various livestock species, including broilers, sheep, and dairy cattle. The requirement for producers to create a plan for monitoring and recording instances of lameness in the organic system plan enables organic livestock producers to identify and address potential problems among animals before they become widespread. In addition, documentation of lameness will provide an auditable trail for certifying agents to verify that livestock producers are monitoring these potential causes of animal suffering.

AMS revised § 205.238(b) to state that synthetic medications allowed under § 205.603 may be administered to alleviate pain or suffering. In addition, synthetic medications allowed under § 205.603 may be administered when preventative practices and veterinary biologics are inadequate to prevent sickness.

AMS amended § 205.238(c)(1) to clarify that milk from an animal treated with an allowed substance in § 205.603, which has a withholding time, may not be sold, labeled, or represented as organic during that holding time. However, organic animals or breeder stock may continue to provide milk for organic calves on the same operation during the withholding time. This is consistent with the 2010 NOSB recommendation that a calf nursing a cow treated topically with lidocaine or other approved synthetic with a withdrawal time would not lose organic status. For example, if an organic beef cow was nursing her organic calf and the cow became injured, her calf could continue to nurse the cow even during the seven-day withholding period if lidocaine was used to minimize pain and stress during her treatment. In this scenario, the calf would not lose organic status.

AMS revised § 205.238(c)(2) to clarify that other veterinary biologics, in addition to vaccines, are exempt from the prohibition on administering animal drugs in the absence of illness. The USDA Center for Veterinary Biologics (CVB) regulates vaccines and all other veterinary biologics. While vaccines are commonly referred to as veterinary biologics, the CVB also categorizes bacterins and toxoids as biologics. This change is consistent with the definition for biologics in § 205.2 and supports § 205.238(a)(6), which identifies the use of vaccines and other veterinary biologics as a required practice to improve animal health.

AMS revised § 205.238(c)(3) to clarify that organic livestock producers are prohibited from administering synthetic or nonsynthetic hormones to promote growth, or for production and reproductive purposes. However, hormones listed in § 205.603 (*e.g.,* oxytocin) may continue to be used to treat illnesses. Stakeholders have noted that the USDA organic regulations do not mention the use of hormones to stimulate production or for reproductive purposes. This addition clarifies that all hormones—unless used to treat an illness—are prohibited in organic production.

AMS added a new § 205.238(c)(8) to prohibit organic livestock producers from withholding treatment designed to minimize pain and suffering for injured, diseased, or sick animals. Injured, diseased, or sick animals may be treated with any allowed natural substance or synthetic medication that appears on the National List. However, if no appropriate medication is allowed for

organic production, organic livestock producers are required to administer treatment even if the animals subsequently lose their organic status. Furthermore, as recommended by the American Veterinary Medical Association, some forms of euthanasia may be an acceptable practice for minimizing pain and suffering.

AMS added a new § 205.238(c)(9) that requires livestock producers to identify and record treatment of sick and injured animals in animal health records. Early identification can lead to more effective prevention or treatment, which will enhance the overall health of the livestock on that operation.

AMS added a new § 205.238(c)(10) that prohibits the practice of forced molting in poultry. Section 205.238(a)(2) of this final rule requires a nutritionally sufficient feed ration for livestock. Forced molting, a practice in which feed is severely restricted for a period of time in order to rejuvenate egg production, runs counter to this provision. The new 205.238(c)(10) was added to be consistent with the NOSB recommendation.

AMS added a new § 205.238(d) that requires organic livestock operations to minimize internal parasite problems in livestock. The plan to minimize internal parasites must include preventative measures such as pasture management, fecal monitoring, and emergency measures in the event of a parasite outbreak. Livestock producers must also work with their certifying agents to approve a parasite control plan.

In certain cases, livestock may suffer from an illness or injury from which recovery is unlikely. AMS added a new § 205.238(e) to address euthanasia based on the 2011 NOSB recommendations. Section 205.238(e)(1) requires livestock producers to maintain written plans for euthanizing sick or injured livestock. Section 205.238(e)(2) prohibits the following methods of euthanasia: Suffocation, manual blows to the head by blunt instrument or manual blunt force trauma, and use of equipment that crushes the neck (*e.g.,* killing pliers or Burdizzo clamps). In the event of an emergency situation where a local, State, or Federal government agency requires the use of a non-organic method of euthanasia, organic livestock operations will not lose organic certification or face other penalties for the use of non-organic methods of euthanasia. The NOSB recommended listing the allowable methods of euthanasia, however, given that new humane euthanasia methods may emerge, AMS does not intend to discourage producer adoption of these techniques. Therefore, AMS allows organic livestock producers to use any method of euthanasia except for those prohibited in section 205.238(e)(2). The list of prohibited methods could be amended to include other techniques, if needed, through future rulemaking. AMS added a new § 205.238(e)(3) which states that after the euthanasia procedure, livestock must be examined to ensure that they are dead.

B. Discussion of Comments Received

1. Selection of Breeds

(Comment) AMS received one comment requesting that we prohibit selective breeding of livestock and poultry for characteristics that may compromise their health and natural behaviors. The comment stated that some chicken breeds that are bred for increased white meat may have difficulty walking due to the size of their breasts relative to the strength/size of their legs.

(Response) Animal breeding is frequently conducted on non-certified operations, outside the scope of organic certification. Day-old birds are often selected and purchased by organic producers before the animals are brought into organic management. Selection of species and types of livestock with regard to suitability for site-specific conditions and resistance to prevalent diseases and parasites is a requirement under § 205.238(a). Some species or types of livestock or poultry may not be suitable for organic production. Under existing regulations, certifying agents should verify that producers have selected breeds that are suitable for their site-specific conditions and that are resistant to prevalent diseases and parasites.

2. Provision of Feed Ration Resulting in Appropriate Body Condition

(Comment) One comment stated that the language proposed at § 205.238(a)(2) ''. . . resulting in appropriate body condition'' should be the sole indicator of the sufficiency of feed rations. Other comments, while expressing support for the inclusion of this additional language, argued that ''appropriate body condition'' is difficult to quantify. One comment requested that body condition standards be specified in the final rule. Other comments requested that body condition assessment guidance accompany the final rule.

(Response) Livestock body condition may vary greatly depending on the livestock breed, age, season of the year, or stage of production. The primary requirement under this section is to require livestock to receive a feed ration that is sufficient to meet nutritional requirements. This would generally be verified by comparing the net energy and other nutrient requirements for the animal with the diet provided. AMS has added ''. . . resulting in appropriate body condition'' as a secondary assessment factor within the regulations for inspectors to use to gauge the nutritional status of an individual animal or group of animals. Because qualified organic inspectors should have sufficient livestock experience to evaluate the nutritional condition of livestock as part of their qualifications to inspect an organic livestock operation, we agree that guidance on how to assess appropriate body condition by species would be helpful for training purposes. AMS will provide such guidance after publication of the final rule.

3. Physical Alterations—General, Surgeries, and Pain Management

AMS received a number of comments requesting specific changes in words and phrases regarding the first part of § 205.238(a)(5): Physical alterations may be performed to benefit the welfare or hygiene of the animals, for identification purposes or safety. Physical alterations must be performed on livestock at a reasonably young age, with minimal stress and pain and by a competent person. These specific comments will be addressed one by one in the following discussion of comments.

(Comment) AMS received many comments proposing that the word ''hygiene'' be removed from § 205.238(a)(5). Comments believed that a broad interpretation of hygiene could create conflict among regulatory provisions, resulting in a loophole where farmers could seek to justify physical alterations even when prohibited under proposed § 205.238(a)(5)(ii). For example, hygiene is the main reason the tails of cows are docked on dairy farms, and thus hygiene should not be a justification for physical alterations.

(Response) AMS agrees that the term hygiene could be used to justify physical alterations otherwise prohibited, and has removed hygiene from this section of the final rule.

(Comment) AMS received comments that ''reasonably young age'' in § 205.238(a)(5) was too vague. These comments requested that we provide target ages for all physical alterations for all livestock.

(Response) The appropriate age of animals for performing alterations may depend on several factors, such as the nature of the physical alteration, temperature, season, species breed, and

health and condition of the animal. Certifying agents will need to work with producers on a case-by-case basis to assess the specific issues, needs, and justifications related to physical alterations on their operation by species and breed for inclusion in their organic system plans within the parameters provided in the final rule. Identifying target ages on every species for every possible physical alteration would be overly prescriptive and would unnecessarily impede operators in the humane management of their livestock. Therefore, AMS has not made changes in the final rule based on this comment.

(Comment) AMS received comments that ''by a competent person'' is too subjective to evaluate and should be removed from § 205.238(a)(5). Comments requested further that ''competent person'' be replaced with ''licensed veterinarian.''

(Response) While AMS did not define a ''competent person,'' AMS will rely on certifying agents to assess the requisite expertise of the individual. Most routine physical alterations, such as dehorning, castration, and beak clipping are not conducted by licensed veterinarians. Livestock operators perform these operations, often on a daily basis. Requiring all physical alterations to be conducted by a licensed veterinarian would result in significant expense and inconvenience to an organic livestock operator. The proposed rule requires that physical alterations be conducted by a ''competent person.'' This would generally be understood to be someone who has the education, training, and experience necessary to conduct physical operations quickly and easily, with minimal stress and pain for the animal. Certifying agents will assess the competence of personnel conducting physical operations and determine if they have the necessary competencies based on the complexity of the alteration to be performed. AMS has not made any changes in the final rule based on this comment.

(Comment) For § 205.238(a)(5), AMS received many comments that the phrase ''minimal stress and pain'' was not an explicit enough description of how physical alterations must be performed on livestock. These comments requested that the use of synthetic pain medications allowed on § 205.603 be mandatory. Similar comments were made regarding the language at § 205.238(a)(7). Again, comments requested that USDA organic regulations mandate the use of synthetic pain medication rather than simply allow them.

(Response) AMS agrees that, in many situations, pain medications may be the best way to minimize stress and pain. While certified operations are permitted to use pain medications to treat or prevent pain caused by performing allowed physical alterations, pain medications may not be necessary for some allowed physical alterations. Therefore, AMS has not made any changes based on these comments.

(Comment) AMS received one comment requesting that we add ''where effective non-physical methods are not available'' to § 205.238(a)(5).

(Response) Under this final rule, physical alterations may be performed to benefit the welfare of the animals, for identification purposes, or for safety purposes. This comment suggests an additional broad requirement that a producer would need to provide justifications for routine, allowed physical alterations, which were not recommended by the NOSB and were not presented for public comment in the proposed rule. Therefore, AMS has not made any changes based on this comment.

4. Physical Alterations—Swine

(Comment) Many comments requested a complete prohibition of needle teeth clipping and tail docking in swine. Some comments supported the principle that needle teeth clipping and tail docking in pigs should not be routinely used, but could be permitted with documentation that alternative methods to prevent harm failed, as proposed in § 205.238(a)(5)(i). One comment supported the provisions regarding tail docking and needle teeth clipping in swine but requested clarification as to whether proof was required at the operation level or on a by litter basis. This comment felt that requiring proof to be provided at a by litter basis seemed excessive and potentially harmful to the welfare of the sows in that operation.

(Response) AMS does not agree with a complete prohibition of needle teeth clipping and tail docking in swine due to possible animal welfare impacts. AMS is retaining this provision based on consideration of recommendations by the NOSB. AMS will allow certifying agents to determine whether the specific need for physical alterations are sufficiently justified by producers on an operation, litter, or individual animal basis in their organic system plans.

5. Physical Alterations—Specific Prohibitions

(Comment) AMS received several comments regarding both the proposed language at § 205.238(a)(5)(ii) and the specific physical alterations proposed as prohibited for livestock and poultry. Many comments were supportive of the physical alterations proposed as prohibited, with some comments offering refinements or requesting clarification. Many comments requested that additional practices be prohibited, and other comments argued that some of the practices that were proposed as prohibited should be allowed.

AMS received comments that the opening sentence of § 205.238(a)(5)(ii), ''The following practices must not be performed on a certified operation,'' creates a loophole in which practices can be performed during the one-year transition of a dairy animal.

(Response) AMS has clarified the regulatory text in the final rule to state: ''The following practices are prohibited . . .'' The discussion of comments on the specific physical alterations proposed as prohibited is divided into avian and mammalian sections.

Avian Physical Alteration Prohibitions

(Comment) AMS received comments identifying that we used the terms ''toe clipping'' and ''toe trimming'' interchangeably and inconsistently in reference to altering the toes of male turkeys in the proposed rule. These comments also said that the proposed rule incorrectly defined this physical alteration practice as applying only to the toes of male turkeys, rather than all turkeys, in § 205.2 and § 205.238(a)(5)(ii) of the rule text. Another comment stated that toe trimming, toe cutting, and de-clawing are all essentially the same toe treatment. AMS also received a separate comment requesting that we prohibit toe clipping in turkeys, or only permit the use of infra-red, rather than a hot blade or electric cauterization.

(Response) The definition of ''toe clipping'' is addressed in this final rule in the Discussion of Comments Received for § 205.2. To be consistent with the changes made to the definition of ''toe clipping'' in § 205.2, the rule text at § 205.238(a)(5)(ii) ''. . . toe clipping of male turkeys unless with infra-red at hatchery . . .'' has been changed to ''. . . toe clipping of turkeys unless with infra-red at hatchery . . .'' AMS received an NOSB recommendation advising the complete prohibition of toe clipping for chickens. Turkeys or other poultry were not included in this prohibition of toe clipping. Methods of both toe clipping and beak clipping are addressed together in a separate discussion following the below discussion of comments regarding beak clipping.

(Comment) AMS received various comments on beak trimming. Many

comments requested that all beak trimming be prohibited, one requested that we only allow infra-red beak treatments, and another comment asked if re-trimming of beaks would be allowed. One comment suggested that AMS limit beak trimming to no more than the thickness of a dime. Some comments were opposed to the prohibition on de-beaking.

(Response) AMS is not completely prohibiting beak trimming in poultry in the final rule due to animal welfare and economic impacts to poultry producers. This physical alteration is allowed at up to 10 days of age. Re-trimming of beaks is allowed at up to 10 days of age, but is not permitted after 10 days of age. In addition, beak trimming cannot be limited to a specific measurement because of the wide variability in beaks of bird species and breeds. Therefore, AMS is retaining the definition of beak trimming in § 205.2 as the removal of the curved tip of the beak as recommended by the NOSB. AMS is also retaining de-beaking as defined in § 205.2, and de-beaking remains prohibited in § 205.238(a)(5)(ii) of the final rule as recommended by the NOSB. AMS received many requests about the methods of beak trimming, toe clipping, and toe cutting, which are addressed immediately below.

Methods of Beak Trimming, Toe Clipping, and Toe Cutting

(Comment) A few comments inquired about various methods of beak clipping, toe trimming, and toe clipping, including the use of traditional mechanical devices, such as knives or scissors, and more modern methods, such as electric cauterization (also called a cautery knife), the hot blade, and infra-red. Some comments stated that the use of infra-red is less invasive and painful, causes less tissue damage, and results in fewer chronic pain issues compared with other methods of poultry beak trimming, toe trimming, and toe clipping. One comment stated that all forms of beak trimming, toe trimming, and toe clipping are inhumane. Other comments asked for guidance on methods of beak trimming.

(Response) Following a review of recent poultry periodicals and literature, AMS notes that infra-red is the newest technology being used for beak trimming, toe clipping, and toe cutting. Articles report that infra-red appears to be more humane and is gradually being adopted over electric cauterization and the hot blade.[6] The final rule does not require all beak trimming and toe clipping to use only the infra-red method since AMS did not include this restriction in the proposed rule and AMS does not know the availability, cost, or impact of only allowing infra-red technology in organic production systems. AMS may request that NOSB provide additional advice and recommendations on methods of poultry beak trimming, toe clipping, and toe cutting if conditions warrant in the future.

(Comment) AMS received two comments requesting that the final rule exclude wattles from the definition of dubbing in § 205.2. They also asked that we remove the prohibition of dubbing in § 205.238(a)(5)(ii). One comment reported that dubbing is used in research to mitigate comb injuries, and is not currently used by the layer industry. This comment stated that with the push for outdoor access in regions where cold weather is a certainty, dubbing may be needed to stop frostbite and other comb injuries that could occur when birds are outdoors.

(Response) AMS disagrees with the comment and is retaining the definition of dubbing that includes both wattles and combs in § 205.2 along with the prohibition of dubbing in § 205.238(a)(5)(ii) of the final rule. Dubbing is the practice of cutting off the comb, wattle and earlobes of chickens. The practice of dubbing, sometimes carried out by poultry operators without anaesthetic, is a cause of pain and distress. Blood circulating from the comb to the wattles helps the bird to regulate its body temperature during hot weather. Removing either wattle or comb provides no benefit to the bird.

Mammalian Physical Alteration Prohibitions

(Comment) AMS received various comments regarding prohibiting the use of some physical alterations of livestock and mandating pain-relieving medications for other physical alterations. Many comments requested that the final rule prohibit or restrict dehorning, yet allow disbudding of cattle. Some comments supported the allowance of dehorning or disbudding, but only if performed by a licensed veterinarian and with pain relief mandated. One comment noted that while caponization was prohibited in poultry, castration of cattle, sheep, pigs, or other animals was not mentioned. This comment requested that castrations be performed by licensed veterinarians with pain relief mandated. Another comment proposed that castration be prohibited after two months of age.

(Response) Dehorning and castration of livestock are important practices for animal welfare and farm management. For example, dehorned livestock are easier and less dangerous to handle and transport; can present a lower risk of interference from dominant animals at feeding time; and can pose a reduced risk of injury to udders, flanks, and eyes of other animals. Castration is also an important practice from a safe handling and product quality perspective. Castrated male cattle (steers) are less aggressive, are easier to handle, and yield better marbled, more tender beef. Therefore, AMS is not prohibiting these practices in the final rule.

While best management practices suggest that dehorning and castration should be done at the earliest age practical to minimize pain and suffering,[7] this suggestion is vague and, as such, would be difficult to enforce. Further, requiring alterations to be performed before a specific age may unnecessarily exclude some animals from further management as organic if alterations were delayed for reasons beyond a certified operation's control. Therefore, AMS did not make these changes in the final rule.

While the final rule does not mandate the use of allowed synthetics to manage pain, it does not prohibit the use of pain medications when performing allowed physical alterations. The final rule allows operations to work with their certifying agents to agree on a physical alteration process that uses medications, as needed, to meet the regulatory requirement to perform alterations while minimizing pain and stress.

(Comment) AMS received one comment seeking to prohibit all branding, and not just face branding. This same comment offered that there are many alternative animal identification methods such as ear tags, ear notches, back tags, neck chains, tail tags, freeze brands, tattoos, paint marks, leg bands, and electronic identification methods (*e.g.,* electronic ear tags, microchips, electronic collars). Another comment stated that our prohibition of face branding would place operations at odds in states with regulations that require face branding of steers from Mexico. Nevada was provided as the example.[8]

[6] American Veterinary Medical Association, Literature Review on the Welfare Implications of Beak Trimming, February 2010. *https://www.avma.org/KB/Resources/LiteratureReviews/Documents/beak_trimming_bgnd.pdf.*

[7] American Veterinary Medical Association, Castration and Dehorning of Cattle. *https://www.avma.org/KB/Policies/Pages/Castration-and-Dehorning-of-Cattle.aspx.*

[8] Nevada State regulations, Chapter 571—Diseased Animals; NAC 571.040 Cattle and bison,

Continued

(Response) In its recommendation on animal welfare, the NOSB recommended a prohibition specific to face branding. Therefore, the scope of the proposed rule submitted for public comment was limited to that aspect. AMS did not make changes based on this comment. In the future, if the NOSB recommends a prohibition on all branding, we will consider that aspect for proposed rulemaking, with opportunity for public comment.

With consideration to the comment regarding state requirements for face branding of imported cattle, AMS has considered this comment and has amended the final rule to provide an exception for these state requirements. We have amended paragraph 205.238(a)(5)(ii) to prohibit face branding, except as required by state or federal law.

6. Monitoring and Recordkeeping Regarding Lameness and Treatment

(Comment) AMS received various comments on the proposed new section § 205.238(a)(8) that requires organic producers to actively monitor lameness within the herd or flock, to document cases and causes of lameness, and to describe how they were managed or treated. One comment from the dairy industry remarked that we do not provide a definition or a consistent system for identifying and assessing the degree and severity of lameness, and as a result, producer observations and recordkeeping will not be universal or consistent. For example, some operations may appear to have more cases because they are addressing a potentially worsening condition at an earlier stage, while less observant and less aggressively managed operations may not be as effective at identifying lameness. This comment described a private industry example of a system that offers consistency with a 5-point locomotion scoring (LS) scale in which an animal with a normal walk and no sign of lameness scores as one (1) with the scale progressing to a score of five (5) as a 'severely lame' cow.[9]

A few comments suggested that we develop thresholds to assist producers with developing plans to reduce the incidence of lameness. As an example, one comment suggested that if greater than 10% of a herd or flock for more than two years experienced lameness, the producer must implement a plan to reduce the incidence of lameness. Another comment suggested we collect data to establish the average percentage of lameness by species and then require producers to stay below that percentage.

Some comments expressed opposition to this proposed requirement. One comment reported that certifying agents are not trained or qualified to ''identify a particular disease or ailment'' and that this requirement would violate the certifying agents' prohibition on consulting. Other comments stated that USDA organic regulations already require livestock producers to maintain treatment records for sick and injured animals per the requirements of § 205.103, and that adding this additional record-keeping requirement was too prescriptive and would do little to ''lead to effective prevention or treatment.''

(Response) AMS included this new requirement in response to an NOSB recommendation, and it will be retained in the final rule. AMS agrees that a species-based system for scoring lameness will follow the final rule as guidance. AMS agrees with comments that establishing a percentage of herd or flock lameness threshold connected to species averages could be valuable, and we will consider requesting that the NOSB provide additional advice and recommendations on herd or flock lameness thresholds.

7. Ammonia Levels in Poultry Houses

(Comment) AMS received comments that it was redundant to include ammonia requirements in both § 205.238 and § 205.241, and comments recommended we keep the requirement in only one section. Other comments suggested we make the requirement in § 205.238 apply to all types of livestock production rather than limit the requirement to poultry production.

(Response) AMS agrees it is not necessary to include both sections as proposed. In the final rule, we have retained the requirement in § 205.241 and removed the requirement in § 205.238.

With regard to ammonia levels in other types of operations, the NOSB recommendations and subsequent proposed rule focused primarily on the ammonia levels in poultry houses. While AMS recognizes that ammonia levels may be relevant for other types of livestock production, we have not broadened the requirement to cover other types of operations in this final rule. AMS may consider future rulemaking to establish ammonia-level action thresholds if recommended by the NOSB and supported by public comment and available evidence.

The remaining discussion of comments regarding ammonia can be found in the discussion of comments in Avian Living Conditions at § 205.241.

8. Use of Milk From Animals Undergoing Treatments

(Comment) AMS received comments on the use of milk from animals undergoing treatment with allowed medications on the National List in § 205.603. Some of these comments asked if milk from cows treated with synthetic parasiticides could be provided to a cow's calf or other young calves in the same operation. One comment requested that the USDA organic regulations include nonsynthetic substances not prohibited on § 205.604 but require an FDA withholding period for milk when these substances are administered. A few comments did not want the milk from treated animals fed to any calf.

In addition, another comment requested the removal of the word ''edible'' from § 205.238(c)(1). This comment argued that including this word could allow the sale of fiber products as organic from animals that have been treated with antibiotics or other prohibited substances.

(Response) AMS concurs with the comments on allowing milk from animals treated with synthetic substances that are included on the National List in § 205.603 to be fed to a treated cow's calf or to other calves in the same operation. AMS also agrees with the comment indicating that the word ''edible'' may provide a loophole in the regulations that would allow the sale of fiber products as organic from animals that have been treated with antibiotics or other prohibited substances. The word ''edible'' has been removed from this regulation in the final rule.

AMS does not agree with comments on restricting the sale of milk from animals treated with nonsynthetic substances that are not included on the National List in § 205.604 but have an FDA-required withholding period. AMS is not aware of any nonsynthetic substance that is categorized as a drug with a required withholding period. The USDA organic regulations, in § 205.105(b), prohibit the use of nonsynthetic substances that are on the National List in § 205.604. Currently, under USDA organic regulations, if a nonsynthetic substance is not listed in § 205.604, it may be used in organic livestock production, provided its use complies with all regulation requirements that supersede the USDA organic regulations. Since USDA organic regulations require prohibited nonsynthetic substances to be listed in § 205.604, AMS cannot include a

2. (e) (1) *http://www.leg.state.nv.us/NAC/NAC-571.html#NAC571Sec002.*

[9] Zinpro Performance Minerals, Locomotion Scoring of Dairy Cattle, *www.zinpro.com/lameness/dairy/locomotion-scoring.*

prohibition of nonsynthetic substances not listed in § 205.604 under § 205.238(c)(1).

Accordingly, § 205.238(c)(1) in the final rule prohibits an operation to ''sell, label, or represent as organic any animal or product derived from any animal treated with antibiotics, any substance that contains a synthetic substance not allowed under § 205.603, or any substance that contains a nonsynthetic substance prohibited in § 205.604.'' Milk from animals undergoing treatment with synthetic substances allowed under § 205.603 cannot be sold as organic but may be fed to a treated animal's calf or to calves on the same operation. Milk from animals undergoing treatment with prohibited substances cannot be sold as organic or fed to organic livestock.

9. Administering Synthetic Medications for Disease

(Comment) AMS received comments on the rule revisions proposed for § 205.238(b). Some of these comments argued that the addition of § 205.238(b)(3), regarding regulation requirements for the use of parasiticides, created confusion. Other comments addressed concerns for physical alterations and surgical procedures and requested that AMS mandate, rather than simply allow, the use of pain medications to relieve pain. One comment requested that AMS add the term ''injury'' to the conditions for which administering synthetic medications is allowed in organic livestock production under § 205.603.

A few comments addressed the prohibition on administering animal drugs in the absence of illness since the scope of the phrase ''animal drug'' as defined by the FDA includes preventative procedures or products. These comments argued that the USDA organic regulations prohibit producers from utilizing drugs that are designed to keep animals healthy and prevent illness. One comment asked if antibiotics could be used to treat pain.

(Response) AMS agrees with the comments that stated that the amendment to § 205.238(b), as proposed, is confusing and should be clarified. In the final rule, § 205.238(b)(3) has been deleted and the requirements for this provision have been incorporated under § 205.238(b). Producers may administer medications that are allowed under § 205.603 to alleviate pain or suffering and when preventive practices and veterinary biologics are inadequate to prevent sickness. This amendment to § 205.238(b) includes allowing the administration of synthetic medications when animals are injured or undergo surgery. The requirements for the use of parasiticides under § 205.238(b) is not changed in the final rule; parasiticides allowed under § 205.603 may be used on: (1) breeder stock, when used prior to the last one-third of gestation but not during lactation for progeny that are to be sold, labeled, or represented as organically produced; and (2) dairy stock, when used a minimum of 90 days prior to the production of milk or milk products that are to be sold, labeled, or represented as organic. AMS does not agree with comments that addressed the prohibition on administering animal drugs, including antibiotics, in the absence of illness to keep animals healthy and prevent illness. Under the USDA organic regulations, a livestock producer must establish and maintain preventive health care practices as prescribed in § 205.238(a). This requirement has been included within the USDA organic regulations since these regulations were published on December 21, 2000. This final rule has not changed this requirement. When preventive practices have been inadequate to prevent illness, a producer may administer synthetic medications that are listed in § 205.603. The USDA organic regulations do allow synthetic medications listed in § 205.603 to be used during surgery for the animal's welfare.

(Comment) One comment stated that it is inconsistent and confusing to allow other veterinary biologics, in addition to vaccines, to be exempt from the prohibition on administering animal drugs in the absence of illness. This comment argued that many vaccines contain compounded drugs, which may include prohibited chemicals such as hormones or anti-inflammatories.

(Response) AMS disagrees with this comment. The final rule does not add any new substances to the National List of Allowed and Prohibited Substances. Currently, vaccines are the only synthetic biologic substance on the National List. All other synthetic biologics are prohibited. Additionally, the USDA organic regulations require synthetic animal drugs that are allowed for use in organic livestock production to be manufactured with excipients (non-active drug ingredients) according to regulation requirements described under § 205.603(f).

(Comment) AMS received comments indicating that the requirements for use of synthetic medications allowed in § 205.238(c)(2) should be the same as the requirements for use of synthetic medications allowed in § 205.238(b)(3). These comments argued that the language in these regulation sections should be consistent because they both address circumstances in which synthetic medications can and cannot be administered.

(Response) AMS agrees with these comments and has amended the final rule by inserting changes into § 205.238(b) to clarify when synthetic medications can be administered in organic livestock production. AMS also revised § 205.238(c)(2) to be consistent with paragraph (b) in this section and to describe the exceptions under which the use of synthetic medications are permitted.

10. Prohibitions on the Use of Hormones

(Comment) AMS received comments asking if the new regulations in § 205.238(c)(3), which prohibit the administration of hormones for growth promotion, production, or reproduction, include oxytocin, which may be used in postparturition therapeutic applications. Comments expressed concern that the addition of the terms ''production'' and ''reproduction'' may cause confusion with the allowed use of oxytocin as a medical treatment in aiding cows after calving.

(Response) AMS agrees with comments about the potential for confusion when producers or certifying agents interpret the terms ''production'' and ''reproduction'' in applications of oxytocin for therapeutic use following calving. In the final rule, AMS amended § 205.238(c)(3) to provide clarification on the allowed use of oxytocin by adding the condition, ''except as provided in § 205.603.'' The inclusion of this condition clarifies the allowed use of oxytocin in organic livestock production for therapeutic applications.

11. Prohibition on Withholding Treatment To Minimize Pain and Suffering

(Comment) AMS received comments on § 205.238(c)(7) recommending that the USDA organic regulations require livestock producers to have a written marketing plan for diverted animals that have been treated with antibiotics or other prohibited substances. These comments added that such marketing plans might encourage medical treatment of illness or injury. A comment from a certifying agent proposed that § 205.238(c)(7) be amended to state that operations cannot: ''Withhold medical treatment designed to minimize pain and suffering from an ill or injured animal in an effort to preserve its organic status. All appropriate medications must be used to restore an animal to health when methods acceptable to organic production fail. Livestock and products

from livestock treated with a prohibited substance must be clearly identified and shall not be sold, labeled, or represented as organically produced.''

(Response) AMS disagrees with these comments and did not add the requirement for a written marketing plan for diverted animals to § 205.238(c)(7). Under OFPA, AMS does not have the authority to require this type of marketing plan. AMS recognizes that a written marketing plan for diverted animals treated with prohibited substances would be a beneficial component of an organic system plan for producers and certifying agents. Certifying agents can encourage producers to include a component for marketing diverted animals in their organic system plan, however this is not required under USDA organic regulations. Organic livestock producers should clearly identify and separate any animal that has been treated with a prohibited substance. Products from livestock treated with a prohibited substance must be clearly identified and shall not be sold, labeled, or represented as organic. In addition, AMS has determined that § 205.238(c)(7), as described in the proposed rule, requires producers to apply all appropriate medications to restore an animal to health when methods acceptable to organic production fail. The amendment proposed by the certifying agent requiring producers to use all appropriate medications to restore an animal to health when methods acceptable to organic production fail is adequately addressed within § 205.238(c)(7).

12. Prohibition on Forced Molting

(Comment) AMS received comments indicating that § 205.238(c)(10), which prohibits the ''practice of forced molting or withdrawal of feed to induce molting,'' is too general. Some comments proposed details and definitions about humane methods of molting to better manage the natural molting behaviors of a flock. A certifying agent suggested that AMS add the following language: ''. . . or other interventions'' to § 205.238(c)(10). This comment indicated that including this phrase would clarify that the USDA organic regulations prohibit all forms of induced or forced molting. An additional comment suggested that forced molting be defined as the starvation of laying hens to make them enter the next laying cycle.

(Response) AMS disagrees with comments proposing that additional language is needed to indicate that all procedures of forced molting are prohibited under § 205.238(c)(10). This regulation specifies that organic producers must not practice forced molting or withdrawal of feed to induce molting. Forced molting practices, including but not limited to the starvation of laying hens, not allowing birds to exercise full range of motion, or the disposal of male chicks or live unhatched eggs by suffocation, are prohibited under § 205.238(c)(10). Because the regulation under § 205.238(c)(10) already includes the prohibition of forced molting or the withdrawal of feed to induce molting, AMS does not agree that additional language is needed to clarify this regulation.

13. Comprehensive Parasite Management Plan

(Comment) AMS received a number of comments in support of the requirement that producers have a comprehensive parasite management plan as required in § 205.238(d). A certifying agent commented in support of the internal parasite management plan, but argued that requiring producers to create a separate plan would be redundant and burdensome to producers. One comment stressed that a parasite management plan should be developed in conjunction with a comprehensive pest management plan.

(Response) AMS agrees with comments in support of a comprehensive pest management plan in livestock and poultry operations that also addresses management of all vectors of internal parasites, illness, and disease. Livestock producers should describe their comprehensive parasite management plan within their overall organic system plan. Under § 205.238(d), livestock producers would describe their parasite management plan as an integral component of comprehensive plans for mammalian living condition practices in § 205.239, or avian living condition practices in § 205.241.

AMS disagrees with comments indicating that a comprehensive plan to minimize internal parasites requires livestock producers to create a separate plan from their organic system plan, which would be redundant and burdensome. The USDA organic regulations do not require producers to create a separate plan, outside of their organic system plan, for comprehensive parasite management.

14. Humane Euthanasia Plan and Prohibited Methods

(Comment) AMS received comments that were in support of the new regulations on humane and prohibited methods of euthanasia described under § 205.238(e). Some comments also sought more details and clarification on methods of euthanasia. The USDA organic regulations specify only three euthanasia methods as prohibited in § 205.238(e)(2) and provide no other parameters for selecting an appropriate euthanasia method. In their comment on the proposed rule, the American Veterinary Medical Association (AVMA) indicated that organic livestock operations culling livestock should implement euthanasia methods according to the most recent edition of the AVMA Guidelines for the Euthanasia of Animals. AVMA argued that the guidelines are widely accepted scientific and ethical standard for euthanasia. Other comments included a request that the USDA organic regulations prohibit the practice of euthanizing piglets by manual blunt force trauma. Another comment asked that we reconsider the banning of Burdizzo devices for emergency euthanasia if other methods are not available. This comment indicated that properly used Burdizzo devices are effective as an emergency euthanasia device for larger animals. One comment requested that we clarify whether poultry operations who cull flocks using onsite euthanasia must adhere to the euthanasia requirements, and requested that we consider developing guidance on culling poultry flocks.

(Response) This final rule specifies, under § 205.238(e)(2), that the following methods of euthanasia are not permitted for use in organic livestock production: suffocation, manual blow to the head by blunt instrument or manual blunt force trauma, and use of equipment that crushes the neck, including killing pliers or Burdizzo clamps. Blow(s) to the head by blunt instrument as prohibited at § 205.238(e)(2) does apply to piglets. AMS disagrees with the comment to allow Burdizzo clamps and retains the prohibition of these clamps under § 205.238(e)(2). AMS agrees with the AVMA comment on euthanasia methods. The final rule, in § 205.238(c)(8), references the AVMA guidelines on euthanasia.

15. Out of Scope Comments

Disposal of Male Chicks or Live Unhatched Eggs by Suffocation

(Comment) One comment asked if we could prohibit the common practice of the disposal of male chicks or live unhatched eggs by suffocation.

(Response) Under the USDA organic regulations, poultry or edible poultry products must be sourced from poultry that has been under continuous organic management beginning no later than the

second day of life. Male chicks or live unhatched eggs that are under continuous organic management can only be euthanized by methods described in § 205.238(e).

VIII. Mammalian Living Conditions (§ 205.39)

A. Description of Regulations

1. Summary of the Final Rule

AMS separated mammalian living conditions from avian living conditions due to the different physiology and husbandry practices for birds and mammals. As a result, AMS revised the title of § 205.239 from ''Livestock Living Conditions'' to ''Mammalian Livestock Living Conditions.'' By creating clear requirements for mammalian livestock and avian livestock, animal wellbeing can be enhanced and consumers can be assured of the integrity of the USDA organic seal. Information regarding avian living conditions are addressed in new § 205.241.

The final rule revised § 205.239(a)(1) to remove the requirement that all ruminant livestock must be able to feed simultaneously. One method of feeding livestock, including ruminants, is the use of a self-feeder or a creep-feeder. With creep-feeding and self-feeding, feed is accessible to all animals at all times though they may not feed at the exact same time. Self-feeding and creep-feeding provide organic ruminant producers with more flexibility and options to manage their farm and livestock in farm-specific methods.

AMS is maintaining the current § 205.239(a)(3), which requires the use of appropriate, clean, dry bedding. If roughages are used as bedding, they must be organically produced and handled by certified operations, with the exception of transitioning dairy producers.

AMS revised § 205.239(a)(4)(i) to specify that shelter must be designed to accommodate natural behaviors over every 24-hour period. Shelter must have sufficient space for the animals to lie down, stand up, and fully stretch their limbs and allow livestock to express their normal patterns of behavior over a 24-hour period. AMS recognizes that there are times when animals will be constrained for livestock handling or management purposes. An animal may be limited in its freedom of movement during parts of the day for a variety of reasons, including milking, feeding, or other handling purposes. Animals may be constrained for limited amounts of time to ensure hygiene and wellbeing of the animals. Stalls for organic dairy cattle are often designed to limit the animals from turning to the sides. This stall design directs manure and urine into a collection system to prevent mastitis and maintain low somatic cell counts in the milk. Mammalian livestock may be housed for part of the day in stalls as described in the organic system plan as long as they have complete freedom of movement during significant parts of the day for grazing, loafing, and exhibiting natural social behavior. This allowance does not permit the use of gestation crates or other confinement systems in which swine would be housed individually in stalls for months at a time. However, if livestock are temporarily confined indoors as permitted in § 205.239(b), livestock must be able to move around, turn around, and stretch their limbs indoors for part of the day. Operations will need to fully describe the use of any stalls, methods used in stall management, and how livestock are able to express their normal patterns of behavior.

AMS added § 205.239(a)(4)(iv) to set requirements for an indoor space for bedding and resting that is sufficiently large and comfortable to keep the animals clean, dry, and free of lesions, with the exception of animals raised on pasture or range. Because livestock on pasture or range may not have access to traditional barns or bedded areas, AMS recognizes that while livestock do need to be provided with shelter (defined in § 205.2), livestock do not need to be provided with indoor space. These types of operations may use windbreaks or other methods to provide shelter for the livestock. Additionally, not all man-made shelters are designed to hold bedding; for example, a shelter designed to provide shade may be portable and thus incompatible with holding bedding. Operations need to describe in their OSP how they will provide shelter to their livestock in a manner suitable for the species, stage of production, and environment.

AMS added new requirements in § 205.239(a)(7) concerning the individual housing of dairy young stock. Section 205.239(a)(7) allows for the individual housing of animals until the weaning process is complete but no longer than six months, as long as the animals have sufficient room to turn around, lie down, stretch out while lying down, get up, rest, and groom themselves. In addition, the individual housing of young stock needs to be designed so that animals can see, smell, and hear other animals.

AMS added three new provisions in § 205.239(a)(8) to require the group housing of swine, with three listed exceptions: § 205.239(a)(8)(i) allows for sows to be individually housed at farrowing and during the suckling period; § 205.239(a)(8)(ii) allows for boars to be individually housed to reduce the likelihood of fights and injuries; and § 205.239(a)(8)(iii) allows for swine to be individually housed after multiple documented instances of aggression or to allow an individual pig to recover from a documented illness.

AMS added two new provisions in §§ 205.239(a)(9) and (10) concerning swine housing. Section 205.239(a)(9) prohibits the use of flat decks or piglet cages. This provision prohibits the stacking of piglets in flat decks in multiple layers. In addition, § 205.239(a)(10) requires that both indoor and outdoor areas for swine have some space that permits rooting. Rooting is a natural behavior that must be accommodated by organic swine producers and could be done in soil, deep packed straw, or other materials. Organic swine producers must also demonstrate how swine will be allowed to root during temporary confinement periods.

AMS added a new provision in § 205.239(a)(11) to further clarify the use of barns or other structures with stalls. If indoor shelter is provided by a structure with stalls, then there must be a sufficient number of stalls that allow for the natural behavior of the animals. In no case may a cage be considered a stall. One exception is provided for this provision: In the case of group-housed swine, more animals than feeding stalls may be allowed as long as all animals are fed routinely every day. AMS is aware of some enhanced swine welfare systems, in which animals are robotically fed once they enter an individual feeding stall; once finished, the animal may leave the stall and another animal may enter for its specific quantity of feed. AMS does not intend to prohibit such systems, which enhance the wellbeing of organic animals. AMS also added specific allowances for a variety of cattle barns, including tie stall barns, stanchion barns, and free stall barns. While these barns can all be suitable for organic certification systems, the specific procedures used by producers with these barns may be incompatible with organic production. If a producer provides too few stalls in a free stall barn or leaves an animal tied up for 24 hours per day in a tie stall barn, these methods would not be permitted under USDA organic regulations.

AMS added a new requirement for outdoor access in § 205.239(a)(12). Organic livestock are required to have unencumbered access to the outdoors year-round, unless temporary confinement is justified under a specific

reason described in the regulations (*e.g.,* nighttime confinement for protection from predators). When the outdoor space includes soil, then maximal vegetative cover must be maintained as appropriate for the season, climate, geography, species of livestock, and stage of production. Ruminants must have access to graze during the growing season. Swine are not required to have access to the soil or vegetation; however, if a swine producer chooses to allow swine to have access to the soil as a rooting material, then the producer must maintain as much vegetative cover as possible given the natural behavior of swine to root, the season, and local environmental conditions.

AMS revised § 205.239(b)(7) to clarify the exemption for temporary confinement for the purpose of breeding livestock. Livestock may only be confined for the time required for natural or artificial breeding. A group of livestock may be confined before the procedures and while the various individuals are bred; afterward, the group shall be returned to living spaces that allow outdoor access. Livestock may not be confined indoors to observe estrus or until they are determined to be pregnant. Section 205.239(c)(1) describes the time when ruminants may be denied access to pasture, but not access to the outdoors, before and after a breeding attempt.

AMS revised § 205.239(b)(8) to clarify the temporary confinement exception for youth livestock projects. Because many youth livestock projects include the sale of market animals, organic animals that were under continuous organic management may be sold as organic animals at youth fairs, even if the sales facility is not certified organic. Thus, the revised provision includes an exemption to the § 205.239(b)(6) requirement that a livestock sales facility be certified as an organic operation. As an example, if a youth exhibition and sale is held at a livestock sales facility that is not certified organic, the youth may sell the organic animal as an organic animal, provided all other requirements for the organic management of livestock are met. During the youth event, the livestock may be temporarily confined indoors. Otherwise, non-certified sales facilities, such as auction barns or fairgrounds, may not sell or represent livestock as organic. AMS provided this exception to encourage the next generation of organic farmers.

AMS revised § 205.239(d) to reflect the similar proposed changes in § 205.239(a)(1). AMS removed the phrase requiring that all ruminants be able to feed simultaneously. This change would allow the use of self-feeding and creep-feeding so that the ruminants would have access to feed continuously over a 24-hour period.

B. Discussion of Comments Received

1. Opposition To Changes in the Mammalian Living Conditions Section/ Make No Changes for Ruminants

(Comment) A number of comments were opposed any changes to the mammalian living conditions section. Some comments indicated that current organic regulations were sufficient and no more were needed. Other comments noted that the sections pertaining to ruminants were sufficient and that no changes needed to be made to them.

(Response) AMS revised the mammalian living conditions sections to clarify a number of provisions for mammals, including ruminants. These changes were recommended by the NOSB through an open public comment process. In addition, livestock living conditions have always been a part of the USDA organic regulations. AMS received many questions from certifying agents and organic producers concerning livestock living conditions that needed clarification in the regulatory text. Due to the NOSB recommendations and the need to clarify livestock living condition requirements, AMS believes that the changes are needed.

2. Outdoor Area Requirements

Many comments were opposed to requiring soil as part of the outdoor access requirement for all mammals. These comments provided many reasons for excluding soil from the outdoor requirement, including environmental, soil quality, animal health, and disease transmission concerns. Commenters opposed soil for dairy animals during the non-growing season and for swine at any time, though some commenters supported soil for swine. Comments opposing soil as a requirement of outdoor access came from producers, certifying agents, trade associations, and others.

Environmental Concerns

(Comment) Comments showed concern that dairy cattle during the non-growing season or during times when the cattle could be temporarily confined during the grazing season would cause environmental damage to the soil and surrounding waters if dairy cattle were required to be on the soil. Comments cited a variety of conditions (*e.g.,* during winter when the ground may become very muddy). Cattle walking and standing on the soil would destroy any vegetation and cause the soil to wash away during subsequent rain events. Comments cited that USDA NRCS provided funding to build hardened outdoor spaces for dairy cattle to use so as to prevent damage to soil and prevent nutrients in the soil being washed into streams and rivers. These comments already noted that in the pasture rule response to comments, AMS recognized that sacrifice areas (soil-based areas that are designed for livestock to be held in during wet or winter conditions) are not possible in all regions and thus cannot be required.

Some comments were also concerned about the environmental damage that swine could do if the outdoor area included access to soil. Natural behavior of swine includes rooting of the soil, which destroys the vegetation and root structure of the vegetation. If swine are left too long on the land, the land loses vegetation and runoff could occur.

Other comments called for minimum outdoor space allowance for swine in order to protect the soil. These comments noted that if there was sufficient space, a minimum vegetative cover could be maintained, which would minimize or prevent any environmental damage the swine may cause. These comments suggested that the NOSB evaluate how much space is required for swine outdoors and then pass a recommendation that AMS could act upon. Other comments suggested that AMS use a space allowance that the NOSB livestock subcommittee had discussed but which had never been passed by the full board.

(Response) USDA organic regulations prohibit organic producers from reducing soil and water quality. The regulations also provide for temporary confinement of livestock to protect soil and water quality. AMS agrees with comments that livestock should be kept off of soil-covered areas during times of the year when livestock could damage soil and vegetation. In response to comments and consultation with NRCS regarding best practices, AMS removed ''soil'' as part of the outdoor requirements but requires that ruminants have access to pasture during the grazing season. However, outside of the grazing season, soil based outdoor areas are not required. Operations must provide year-round outdoor access, using either hardened surfaces or soil based areas unless the livestock are temporarily confined indoors.

AMS also agrees with some comments that thought the NOSB should reevaluate swine living conditions and determine minimum outdoor space requirements. AMS recognizes that if swine are placed in too small of an area

with soil, environmental problems may occur. AMS is including this topic area in the list of issues that the NOSB may address in a future recommendation.

Health Concerns

(Comment) Some comments expressed concern regarding health implications for swine if soil access was required as part of the outdoor space requirements. These comments noted that a number of diseases that had been eradicated in domestic swine, such as pseudorabies, were still present in feral swine. With outdoor space that requires soil access, domestic swine are more likely to come in contact with feral swine and contract one of these diseases. In the event that these diseases are detected in the domestic swine herd, there would be trade implications as countries may close their markets to U.S. pork.

These comments also discussed health concerns related to consumer safety. Trichinosis, a parasite in pork, has essentially been eradicated in the domestic swine herd. Comments expressed concerns that with outdoor access, swine could become infected with this parasite and could then infect consumers of this pork with this painful condition.

(Response) AMS also agrees with some comments that thought the NOSB should reevaluate swine living conditions and determine minimum outdoor space requirements. Therefore, the final rule requires year-round outdoor access for swine but does not require access to soil-covered areas. AMS recognizes that if swine are placed in too small of an area with soil, environmental problems may occur. AMS is including this topic area in the list of issues that the NOSB may address in a future recommendation. As part of the review process, the NOSB can take into consideration the presence of diseases in the soil or in feral hog populations, which if transmitted to domestic swine, may cause loss of foreign markets to organic and conventional pork producers.

3. Indoor Housing Requirements

Comments expressed concern with several topics regarding indoor housing for mammalian species, including stalls, space for natural behaviors, space for young dairy animals, swine confinement, the requirement that all mammals have access to indoors, and the use of bedding.

(Comment) Comments noted opposition to the proposed requirement that livestock be able to lie down in full lateral recumbence, turn around, and fully stretch their limbs. These comments stated that most dairy producers use a type of stall housing—whether free stall, tie stall, or stanchion barns—that would not provide the indoor space for a dairy cow to lie down in full lateral recumbence. Most comments wanted organic dairy producers to have the flexibility to use their existing barns and structures as part of an organic system plan approved by their certifying agent. These comments explained that cattle rarely lie down in that manner and usually only do so to sun themselves in a pasture. Many comments preferred the current language for natural maintenance, comfort behaviors, and an opportunity to exercise.

(Comment) Comments also showed concern with the proposed requirements for dairy young stock. Comments agreed with the description of the housing for dairy young stock, but these comments differed on the timing of when dairy young stock must be group-housed. Some comments wanted the dairy young stock to be group-housed by eight weeks of age while others wanted group housing to occur at six months of age. Those preferring a lower age for group housing cited EU organic standards, which include lower age requirements. The comments preferring six months of age discussed how weaning—the removal of milk from the diet of a young animal—is not a good stopping point as calves may retain the suckling impulse. Comments described how a calf can ruin the udder of a heifer by suckling on her in response to the suckling impulse, and these comments tended to prefer six months as the cutoff for group housing, which coincides with when dairy young stock must be provided with pasture or outdoor access if outside the growing season.

(Comment) Comments also addressed indoor housing for swine. Many comments were opposed to the use of farrowing crates or stalls and called for AMS to specifically prohibit their use. These comments wanted to ensure that swine had the opportunity to turn around, lie down, and move around, even during the farrowing period. Other comments were concerned that producers would individually house swine after documented cases of aggression. These comments requested that AMS define aggression so producers did not individually house swine unnecessarily. Comments were split on the requirement for bedding or rooting materials during the farrowing period. Some wanted to require rooting and nesting materials specifically during that time frame while others wanted to remove the requirement for bedding or rooting materials during the farrowing period to reduce disease and maintain cleanliness of the hogs.

(Comment) Comments were split on the issue of a cleanliness standard. Some comments supported such a standard if appropriate guidance was issued. Other comments opposed a cleanliness standard based on the rationale that during certain stages of production—such as ruminants on early spring pastures or swine with access to the soil during rainy periods—animals will be healthy yet also be dirty with manure or mud. Comments that opposed this standard preferred the requirement for clean, dry bedding to be provided. One comment was concerned about the requirement for a shelter that can hold bedding. This comment noted that many cattle are raised in pasture or range conditions that would not include access to the indoors, though may include shade and windbreaks for animal wellbeing.

(Response) AMS agrees with the comments that indicated that indoor space requirements to allow for full lateral recumbence and turning around without touching the enclosure may negatively affect many current producers without enhancing animal well-being. To clarify this issue, AMS revised the standard to specifically state that over a 24-hour period, mammalian livestock must have the opportunity to move, turn around, and exhibit natural behaviors.

AMS also stated that tie stalls, free stalls, stanchion barns, compost pack, and bed pack barns are all suitable facilities for cattle and can be used as part of an Organic System Plan. As part of the OSP, mammalian livestock producers must describe how livestock, over a 24-hour period of time, will be able to turn around, move, lie down, and exhibit natural behaviors. AMS recognizes that certain stall facilities designed for animal comfort and cleanliness purposefully minimize the ability of the animal to turn around. Livestock cannot be confined to these stalls all day, even if the animal may be temporarily confined indoors. As an example, if during the winter, livestock are temporarily confined indoors in a tie stall barn due to a snow storm, the livestock must have the opportunity to move around, turn around, and exhibit natural behaviors.

AMS has declined to clarify individual housing in response to swine aggression. The threshold for aggression to allow for individual housing may differ depending on the facilities, the operation, the producer, and the breeds of swine involved. Swine producers must describe their response to aggression in their OSP, which must be

approved by their certifying agent. AMS chooses to provide flexibility to organic swine producers to work with their certifying agents to develop a plan for when swine may be individually housed due to aggression.

AMS has chosen to keep the requirement for rooting materials but has removed the requirement that rooting must be available in exercise areas. Rooting is a natural behavior for swine and must be provided by organic swine producers. However, AMS agreed with the comments that requested that bedding and rooting material not be required during the farrowing period when swine may be individually housed. Swine producers may choose to use bedding and rooting material during the farrowing period, but it is not required.

AMS is clarifying that the USDA organic regulations for livestock require outdoor space as the default living space. Indoor space may be provided as a type of shelter, but it does not have to be provided to organic livestock. If indoor space is provided, then the structure must include space for appropriate bedding. However, in range or pasture conditions where no indoor space is required, the requirements for the indoor space do not apply, and bedding does not need to be provided. This does not allow producers to deny livestock access to the indoors if required by law or if it is necessary for the welfare of the animals. However, AMS recognizes that in many production systems, beef cattle, sheep, and some dairy animals may be routinely raised outdoors without indoor spaces. Shade and shelter must be provided based on what is appropriate for the animal species, season, and environmental condition.

IX. Avian Living Conditions (§ 205.241)

A. Description of Regulations

1. Summary of the Final Rule

The new § 205.241, entitled ''Avian living conditions,'' includes requirements for all organic avian (''bird'' or ''poultry'') species, including but not limited to, chickens, turkeys, geese, quail, pheasant, and any other species that are raised for organic eggs, organic meat, or other organic agricultural products.

New § 205.241(a) establishes general requirements for organic poultry production. These general principles are further clarified in §§ 205.241(b), (c), and (d). Section 205.241(a) requires organic poultry operations to establish and maintain living conditions that accommodate the wellbeing and natural behaviors of the birds. These living conditions include: Year-round access to the outdoors, soil, shade, shelter, exercise areas, fresh air, direct sunlight, clean water for drinking, materials for dust bathing, and adequate space to escape aggressive behaviors. The living conditions provided should be appropriate to the species, its stage of life, the climate, and the environment. These requirements, based upon a 2009 NOSB recommendation,[10] are largely identical to previously established livestock requirements at § 205.239(a)(1), although AMS has added requirements for materials for dust bathing and for adequate outdoor space to escape aggressive behaviors.

New § 205.241(b) specifies the indoor space requirements for avian species. While shelter must always be provided to birds, indoor space is not a requirement. If indoor space is provided to the birds, then the indoor space requirement must be followed. New § 205.241(b)(1) requires that indoor space be sufficiently spacious to allow all birds to move freely, stretch their wings, stand normally, and engage in natural behaviors. Cages or environments that limit free movement within the indoor space are prohibited. In addition, the indoor space must allow birds to engage in natural behaviors such as dust bathing, scratching, and perching. The requirements are adopted from a 2009 NOSB recommendation and modify previously established requirements for organic livestock at § 205.239(a)(4) that required, ''shelter designed to allow for . . . natural maintenance, comfort behaviors, and opportunity to exercise''.

Section 205.241(b)(2) requires producers to monitor ammonia levels at least monthly and implement practices to maintain ammonia levels below 10 ppm. When ammonia levels exceed 10 ppm, producers must implement additional practices and additional monitoring to reduce ammonia levels below 10 ppm. Ammonia levels above 25 ppm are not in compliance with organic avian living conditions. Ammonia is a natural breakdown product of manure from livestock and is harmful to birds when inhaled, especially at concentrations above 25 ppm. In most cases, high levels of ammonia indicate that litter is damp or litter management practices require modification.

New § 205.241(b)(3) clarifies the lighting requirements for organic layers and fully feathered birds. Organic producers may use artificial light for up to 16 hours per day (24-hour period). The 16-hour period must be calculated as a single continuous time period. Artificial light must be lowered gradually to encourage hens to move to perches or otherwise settle for the night. Producers must design indoor spaces with access to natural light so that, on sunny days, inspectors can read and write when the lights are turned off. This requirement sets forth a performance-based standard that facilitates inspection, provides for enough lighting to accommodate natural avian behavior, and allows flexibility to operations in determining how to design their facilities for compliance.

Section 205.241(b)(4) describes the required exit areas, or doors, on shelters so that the birds can easily access both indoor and outdoor areas. Access and utilization of outdoor areas is a core principle of organic production systems. Organic avian systems must be designed so birds have ready access to outdoor areas and so birds are able to return indoors to roost in the evening. Producers must provide exit doors and door sizes to enable all birds to access outdoor and indoor areas. Door size and appropriate placement must provide meaningful outdoor access to the birds. Exit doors must be designed and managed in a manner that prevents movement of wild birds, rodents, and other animals into the poultry house.

New § 205.241(b)(5) requires perches for chicken layers at a rate of six inches per bird for all housing, with the exception of aviary housing. Perch space may include the alighting rail in front of nest boxes. Perches are not required for broilers, meat birds, or layers of non-*Gallus gallus* species. Aviary housing must provide six inches of perch space for 55 percent of the flock (*i.e.,* 3.3 inches of perch for each bird in flock). Perch requirements for aviary housing have been adjusted, as birds in aviary housing are also able to escape aggressive behavior by moving between tiers in the house. These requirements are adopted from 2009 and 2011 NOSB recommendations.

New § 205.241(b)(6) specifies indoor requirements to allow for certain natural behaviors. Indoor space must include areas that allow for scratching and dust bathing. Litter (*i.e.,* bedding), such as wood shavings or straw, must be provided indoors. Manure excreted by birds in a poultry house alone, without additional litter, would not be sufficient to meet this requirement. This section also requires that litter be maintained in a dry manner. Wet litter can lead to a variety of problems for birds, including excess ammonia, lameness, and pest problems. Litter may be topped off

[10] *https://www.ams.usda.gov/sites/default/files/media/NOP%20Final%20Sunset%20Rec%20Animal%20Welfare.pdf.*

when needed to maintain sufficient dryness. The requirements are adopted from 2009 and 2011 NOSB recommendations.

Section 205.241(b)(7) includes specific flooring requirements for indoor avian housing with slatted/mesh floors. These houses must provide at least 30 percent solid flooring to allow birds indoors to engage in natural behaviors, including scratching and dust bathing, without crowding. The requirement is adopted from a 2009 NOSB recommendation.

New §§ 205.241(b)(8), 205.241(b)(9), and 205.241(b)(10) list the required minimum indoor space requirements for different types of housing. These are minimum standards, and organic producers may choose to provide more indoor space than required. The indoor space requirements apply to chickens (*Gallus gallus*), with layer requirements at § 205.241(b)(8), pullet requirements at § 205.241(b)(9), and broiler requirements at § 205.241(b)(10). Indoor space requirements for layers vary by the type of housing provided. The types of housing are further defined in § 205.2 and include: Mobile housing, aviary housing, slatted/mesh floor housing, and floor litter housing. For housing that does not fit into any of these defined types, the indoor space requirement is no more than 2.25 pounds of hen per square foot. Pasture pens that are moved regularly and provide direct access to soil and vegetation are not considered indoors (see definition of ''outdoors'' in § 205.2). These requirements are adapted from 2009 and 2011 NOSB recommendations, and made in consideration of third-party animal welfare standards.

AMS has established indoor space requirements for common types of poultry housing. Less indoor space is required per bird in houses that provide more access to vertical space in the house, as birds have more room to move around (*e.g.,* aviary and slatted/mesh floor housing). Housing where birds have more limited access to vertical space (*e.g.,* floor litter housing) must provide more indoor space per bird. AMS has also allowed for higher stocking densities in mobile housing, as birds managed in these systems spend more time outdoors, and mobile housing must be relatively small and light, as it is moved frequently.

AMS has only established indoor space requirements for chickens in this final rule. AMS may propose space requirements for other avian species in the future. Other avian species must meet all other indoor requirements including exit doors, ammonia levels, and lighting.

AMS is using pounds of bird per square foot to establish space requirements. In other words, the minimum space that must be provided depends on the average weight of birds at that time. All weight references in §§ 205.241(b) and (c) refer to the weight of live birds and not the weight of processed birds, for example. By stating the requirement in pounds per square foot, the application of the space requirement is more consistent between breeds, where the average weight per bird can vary significantly. This unit of measurement (pounds per square foot) was recommended by the NOSB in 2011 for pullets and broilers, and AMS is extending this same unit of measurement to layers. Under this final rule, larger breeds (*i.e.,* heavier on a per bird basis) must be provided with more indoor space than smaller birds, on a per bird basis. For example, Rhode Island Red birds are heavier than White Leghorns or ISA Browns, and thus cannot be stocked as densely, in terms of number of birds per unit area.

For example, a layer in a floor litter housing system that is 32 weeks of age and weighs 4.3 pounds must be provided with 1.43 square feet per bird (equivalent to 3.0 pounds of bird for each one square foot); however, at 80 weeks of age and a weight of 4.5 pounds, each bird must be provided with 1.5 square feet per bird (3.0 pounds of bird for each one square foot). In other words, for each 10,000 square feet, a producer could stock 6,993 birds at 32 weeks of age (bird weight of 4.3 pounds) but only 6,667 birds at 80 weeks of age (bird weight of 4.5 pounds). Although older and heavier birds require more space, natural mortalities over time may result in compliance with the space requirements over a production cycle. To calculate the weight of birds, an average weight may be established for the flock by taking weights of a representative sample of the flock. The requirement is not specific to each individual bird in a flock. AMS understands that many producers already monitor and track bird weight closely during the production cycle to monitor bird development and health and calculate feed requirements. However, if weight is not monitored by a producer, the producer will need to establish the weight of birds based on objective criteria to determine the space required indoors and outdoors. Certifiers may also weigh birds at inspections to verify compliance with the requirements.

New § 205.241(b)(11) specifies how the area of the indoor space is calculated. Indoor space must be calculated to ensure that birds are provided with adequate indoor space to meet the space requirements at §§ 205.241(b)(8) through (10). The total size of the indoor space is calculated by including all flat areas in a house, excluding nest boxes. Elevated round perches, for example, are not flat areas and could not be included as indoor space. These requirements match various third-party animal welfare standards, which consider nest boxes to be distinct from useable floor areas of the house where birds can move around freely. They also align with the 2009 and 2011 NOSB recommendations.

New § 205.241(b)(12) clarifies that indoor space may include enclosed porches and lean-to type structures (*e.g.* screened in, roofed) provided that the birds always have access to the space, including during temporary confinement events. The same porch must not be counted as indoor space if the birds do not have continued access to the space during temporary confinement events. This ensures that enclosed porches that are not fully accessible to birds are not counted in indoor space calculations.

Section 205.241(c) establishes the requirements for outdoor areas for organic avian species, including the amount of outdoor space that must be provided to organic avian species. The requirements of section 205.241(c) are adopted or adapted from previously established requirements at section 205.239, 2009 and 2011 NOSB recommendations, and third-party animal welfare organization standards. Section 205.241(c)(1) requires that the outdoor space be designed to promote and encourage outdoor access for all birds. Producers are required to provide access to the outdoors at an early age. This section requires door spacing to be designed to promote and encourage outdoor access and requires outdoor access to be provided on a daily basis (further described at § 205.241(b)(4)). Outdoor access may only be temporarily restricted in accordance with § 205.241(d).

Section 205.241(c)(2) requires outdoor areas for poultry to have a minimum of 50 percent soil and that the soil portion of the outdoor area include maximal vegetative cover. Vegetative cover must be maintained in a manner that does not provide harborage for rodents and other pests. For example, a producer may mow vegetation to ensure that tall vegetation does not provide harborage for pests. A maximum of 50 percent of the outdoor area may be gravel, concrete, or surfaces other than soil or soil with vegetative cover. Maximal vegetation is required, as vegetation protects soil and water quality and

allows birds to engage in natural behaviors, including foraging, pecking, and scratching. The amount of vegetation present will depend on the season, climate, geography, species, and the stage of production.

Section 205.241(c)(3) clarifies how producers may provide shade to meet the general requirements of § 205.241(a). Shade may be provided in outdoor areas by trees, shade structures, or other appropriate objects. This section addresses shade in outdoor areas; it does not permit structures that do not meet the definition of ''outdoors'' (§ 205.2) to be included in calculations of outdoor space.

New §§ 205.241(c)(4) through (6) specify minimum outdoor space requirements for chickens (*Gallus gallus*). AMS has only established outdoor stocking densities for chickens in this final rule. AMS may propose space requirements for other species in the future.

Organic layer producers must provide at least one square foot of outdoor space for every 2.25 pounds of bird in the flock. For example, if birds average 4.5 pounds, a producer must provide 2.0 square feet of outdoor space for each bird in the flock. Organic pullet producers must provide at least one square foot of outdoor space for every 3.0 pounds of bird in the flock. Organic broiler producers must provide at least one square foot of outdoor space for every 5.0 pounds of bird in the flock. Outdoor space must be provided for all birds in the flock (*i.e.,* a producer must assume that all birds are outdoors at once to calculate the outdoor space that must be provided). All weight references in §§ 205.241(b) and (c) refer to the weight of live birds and not the weight of processed birds.

New § 205.241(c)(7) clarifies that porches and lean-to type structures that are not enclosed (*e.g.* with a roof, but with screens removed) and allow birds to freely access other outdoor areas can be counted as outdoor space. This ensures that enclosed porches are not counted as outdoor space, while providing flexibility for producers to use modified porches as outdoor space when they are open to larger outdoor areas that the birds can access.

New § 205.241(d) describes the conditions under which organic avian livestock producers may temporarily confine birds indoors (''temporary'' and ''temporarily'' further defined at § 205.2). Producers must record confinement, and should do so in a manner that will demonstrate compliance with the regulations (also see § 205.103). Records could include the reason for the confinement, the duration of the confinement, and the flocks that were confined. Records should be sufficient for a certifier to determine if birds were confined in compliance with this section. The requirements of section 205.241(d) are adopted or adapted from previously established requirements for organic livestock at section 205.239(b), 2009 and 2011 NOSB recommendations, and third-party animal welfare organization standards.

New § 205.241(d)(1) provides an allowance for temporary confinement in response to inclement weather, which is defined at § 205.2. In addition, this provision allows birds to be confined indoors when the temperature does not exceed 40 °F. It also allows birds to be denied outdoor access or be brought inside when the daytime temperature exceeds 90 °F. In this case, producers have to provide outdoor access during parts of the day when temperatures are between 40–90 °F, unless other forms of inclement weather occur. Weather may still qualify as inclement weather (§ 205.2) within the 40–90 °F temperature range. For example, excessive precipitation and very violent weather can occur when temperatures are within 40 °F and 90 °F. Likewise, weather may meet the definition of inclement weather within the range of 40 °F and 90 °F if the relative humidity is very high and the air temperature is nearing 90 °F, or under extremely windy conditions. As inclement weather is defined, in part, as weather than can cause physical harm to a species, a producer would still be in compliance with § 205.241(d)(1) if birds were confined at temperatures that did not exceed 90 °F, if the weather could cause physical harm.

Section 205.241(d)(2) provides an allowance for temporary confinement indoors due to a bird's stage of life. In this section, AMS has established specific requirements for confining chicken broilers and chicken pullets due to their stage of life (''stage of life'' previously defined at § 205.2). Additionally, the section includes a general provision for confining other avian species until fully feathered. Chicken broilers may be confined through 4 weeks of age and chicken pullets may be temporarily confined indoors through 16 weeks of age. The NOSB recommended 16 weeks of age as the age after which outdoor access is required to provide adequate time for pullets to complete their vaccination program before exposure to pathogens outdoors. Any confinement beyond the time when birds are fully feathered must be in accordance with § 205.241(d).

New § 205.241(d)(3) provides an allowance for temporary indoor confinement under conditions in which the health, safety, or well-being of the birds could be jeopardized. Temporary confinement must be recorded, and to confine birds under this provision, a producer must have sufficient justification to demonstrate that an animal's health, safety, or well-being could be jeopardized by access to the outdoors. Certifiers will verify compliance with this requirement. Producers and certifiers should consult with animal health officials, as appropriate, to determine when confinement of birds is warranted to protect the health, safety, or well-being of the birds. Animal health officials are also encouraged to reach out to certifiers and to AMS to discuss specific health concerns. AMS will continue to engage animal health officials, including State Departments of Agriculture and State Veterinarians, about risks to bird health and provide appropriate guidance to certifiers or producers, as necessary.

New § 205.241(d)(4) provides an allowance for indoor confinement to prevent risk to soil or water quality. This provision allows for confinement of birds when the outdoor area is being managed to reestablish vegetation. As outdoor areas must be maximally vegetated, producers may need to occasionally confine birds to meet the vegetation requirement at § 205.241(c)(2).

Section § 205.241(d)(5) provides an allowance for indoor confinement for preventive health care procedures and for the treatment of illness or injury. Neither life stages nor egg laying are considered an illness for confinement purposes. For example, this provision allows producers to briefly confine a flock to administer a vaccine or to confine an individual animal that requires medical treatment.

New § 205.241(d)(6) provides an allowance for indoor confinement for sorting, shipping, and poultry sales. Birds must be managed organically during the entire time of confinement. For example, any feed provided during confinement must be organic. Confinement must be no longer than necessary to sort the birds or to catch the birds, place them in shipping containers, and conduct the sale.

New § 205.241(d)(7) provides an allowance for indoor confinement to train pullets to lay eggs in nest boxes, with a maximum period of five weeks allowed for confinement. The training period must not be any longer than required to establish the proper behavior. As soon as the behavior is established, birds must be provided

with access to the outdoors, except when confined in accordance with other provisions under § 205.241(d).

Section 205.241(d)(8) provides an allowance for indoor confinement for youth exhibitions, such as with 4–H or the National FFA Organization. This provision also includes an exemption to the requirement that a livestock sales facility be certified as an organic operation. As an example, if a youth exhibition and sale is held at a livestock sales facility that is not certified organic, a youth may sell birds there as organic, provided all other requirements for organic management are met. During the youth event, the livestock may be temporarily confined indoors. Otherwise, non-certified sales facilities, such as auction barns, may not sell or represent livestock as organic. AMS is adding these provisions at § 205.241(d)(8) to encourage the next generation of organic producers.

New § 205.241(e) requires organic poultry producers to manage manure in a manner that does not contribute to contamination of crops, soil, or water quality by plant nutrients, heavy metals, or pathogenic organisms. Organic poultry producers must manage the outdoor space in a manner that does not put soil or water quality at risk. In addition, organic poultry producers must comply with all other governmental agency requirements for environmental quality. The requirements of this section are adapted from previously established requirements for organic livestock at section 205.239(e).

B. Discussion of Comments Received

1. Ammonia Levels

(Comment) AMS received several comments noting that it was redundant to include ammonia requirements in both § 205.238 and § 205.241, and recommending that we keep the requirement in only one section. Other comments suggested we make the requirement in § 205.238 apply to all types of livestock production rather than limit the requirement to poultry production.

(Response) AMS agrees it is not necessary to include both sections as proposed. In the final rule, we have retained the requirement in § 205.241(b)(2) and removed the requirement in § 205.238. AMS recognizes that ammonia levels may be relevant for other types of livestock production, but we have not broadened the requirement in the final rule. AMS may seek the NOSB's recommendation on this topic at a later date.

(Comment) We received comments that it was not clear if AMS was establishing a maximum ammonia limit of 10 ppm or 25 ppm. These comments noted that the consequences of exceeding 25 ppm were not clearly different than the consequences for exceeding 10 ppm. Other comments stated that birds could be continuously exposed to ammonia levels in excess of 10 ppm but below 25 ppm without any consequences, limiting the benefits to animal welfare from this requirement.

(Response) The final rule is modified to clarify that producers must implement practices to maintain ammonia levels below 10 ppm. The 10 ppm level is established so that organic birds live in an indoor environment without excessive ammonia levels, which can be harmful to bird health. If required monthly monitoring indicates ammonia levels are above 10 ppm, then the producer must conduct additional monitoring and implement additional practices to bring ammonia levels to below 10 ppm.

The rule also establishes a maximum ammonia level of 25 ppm. Ammonia levels above 25 ppm would be a violation of the organic requirements and lead to appropriate compliance actions, including potential loss of organic certification. The ammonia levels described in the final rule are consistent with the NOSB's recommendation and the thresholds established by a number of animal welfare standards.

(Comment) We received some comments that a maximum ammonia level of 25 ppm was too high and that AMS should revise the upper limit to 20 ppm to better protect animal health.

(Response) AMS has not revised the requirement in the final rule because the 25 ppm level limit was established based on NOSB's recommendation. This limit is also consistent with various third-party animal welfare standards. Furthermore, AMS notes that a producer is required to implement additional practices to reduce ammonia levels when levels exceed 10 ppm. With this 10 ppm action level, AMS does not think it is necessary to reduce the upper limit to be below 25 ppm.

(Comment) We received comments related to the monitoring and measurement of ammonia levels. One comment argued that measurement of ammonia with an objective tool such as test strips or meters should not be required and that the rule should allow for subjective measures (*e.g.,* a smell test). Another comment noted that the human nose cannot reliably or accurately detect levels of ammonia and recommended AMS clarify that subjective measurement is not sufficient to determine ammonia levels. We also received comments that monthly testing may not be adequate to verify compliance with the limits proposed.

(Response) In the final rule, AMS has not specified how ammonia levels are to be measured. Producers and certifiers may use a number of methods to measure ammonia levels, including test strips, continuous monitoring devices, or handheld meters. Given the minimal cost of the simplest methods to test ammonia levels and that action is required by producers at a relatively low level (above 10 ppm), producers must use a non-subjective method to measure ammonia levels.

AMS agrees that monthly monitoring may not be sufficient when ammonia levels exceed 10 ppm. AMS has revised the final rule at § 205.241(b)(2) to specify that additional monitoring is required when ammonia levels exceed 10 ppm. The additional requirement is included to ensure that the additional practices implemented by the producer lower ammonia levels below 10 ppm. A producer may return to monthly ammonia monitoring when ammonia levels fall below 10 ppm.

2. Lighting

(Comment) AMS received many form letter comments stating that the regulations should require 8 hours of continuous darkness each day for all birds. The comments appear to prefer this to the language proposed at § 205.241(b)(3) that states, ''artificial light may be used to prolong the day length up to 16 hours.'' Comments suggested the rule as proposed would not ensure a period of darkness.

(Response) AMS has revised the final rule to state, ''artificial light may be used to prolong the day length, to provide up to 16 hours of continuous light.'' AMS has included the word ''continuous'' to ensure that layers and mature birds are not subjected to multiple periods of light and dark over the course of a 24-hour day. In most locations, except for locations in extreme latitudes during summer months, this requirement ensures that birds are provided with an 8-hour period of continuous darkness per day, as requested by comments. Producers located in extreme latitudes are not required by the final rule to provide 8 hours of total darkness.

(Comment) Several comments requested clarification about whether the time period for dimming artificial light is to be included in the 16-hour time period described in § 205.241(b)(3).

(Response) Artificial light may be used to provide up to 16 hours of

continuous light. The rule does not allow for additional use of artificial light outside of this continuous 16-hour time period. If artificial lights are dimmed, the time that artificial lights are on (dim or not) must be included within the allowed 16-hour time period.

(Comment) Several comments noted that the method for evaluating the level of natural light in a poultry house (§ 205.241(b)(3)) was overly subjective, including a comment that different inspectors may require different light levels to read and write. Comments suggested that the requirement could be difficult to enforce or that differences between inspectors could lead to inconsistent enforcement of the requirement. Several comments requested we set a specific light requirement that could be verified with a light meter.

(Response) AMS considered alternatives to the requirement as proposed, including a requirement to measure light quantitatively. This alternative would have required producers and organic inspectors to use light meters to monitor and verify the amount of light in a poultry house. While a specific minimum light level could be established, AMS does not believe it is necessary to meet the objective of providing natural light and would impose an additional cost on producers or certifiers. AMS decided that a qualitative assessment of natural light by inspectors, as specified in the proposed rule, is adequate to ensure poultry houses include sufficient natural light. The final rule, therefore, is unchanged.

(Comment) AMS received some comments that the requirement to dim artificial light intensity gradually was not necessary and could require producers to install new equipment. One comment suggested we do not require that lights be dimmed but only recommend it, by changing the wording from, ''must be lowered gradually,'' to ''should be lowered gradually.'' Other comments stated that continuous dim lighting be prohibited.

(Response) To protect bird welfare by ensuring that birds are provided with a period of time to move to perches or settle for the night, AMS has retained the requirement that artificial light be lowered gradually at night. AMS notes that producers may turn off artificial light before the end of the natural day to allow natural light in the house to lower gradually. In this case, the total length of the day, including any use of artificial light, would not exceed 16 hours for layers and mature birds except for operations located in extreme latitudes, where natural day lengths may exceed 16 hours per day. The requirement at § 205.241(b)(3) applies only to layers and fully feathered birds.

(Comment) We received one comment that stated that AMS should require windows on poultry houses to be evenly distributed to allow for natural light throughout the house.

(Response) The final rule requires that natural light be provided in housing for layers and mature birds, such that natural light indoors is sufficient for an inspector to read and write when all lights are turned off. As this requirement applies to indoor space and could be applied to any location indoors, AMS has not included additional requirements in the final rule for windows and skylights to be distributed evenly in a house. Housing where natural light is sufficient (*i.e.,* to read and write) in only a few localized places within the house would not meet the requirement. Natural light must be sufficient for an inspector to read and write throughout the house when all artificial lights are off in the house.

(Comment) Several comments asked why AMS only discussed ''layers and mature birds'' in the section on use of artificial light. Comments requested clarification on the use of artificial light for production of meat birds (*e.g.,* broilers, turkeys) and for immature layers (*e.g.,* pullets). Comments stated that continuous light has negative effects on all birds and that AMS should not limit the requirement to layers and mature birds only. Similarly, several comments noted that it was unclear if the requirements for natural light indoors applied only to layers and mature birds, or if the natural light requirement applied to all poultry houses.

(Response) AMS has clarified that layers and fully feathered birds, including fully feathered broilers and fully feathered turkeys, are subject to the artificial light requirement (§ 205.241(b)(3).

3. Exit Areas

(Comment) Comments suggested AMS simplify the final rule by describing all requirements about exit areas (*i.e.,* doors) in a single section. As proposed, AMS described requirements for exit areas in §§ 205.241(b)(5) and 205.241(c)(2).

(Response) AMS agrees with these comments. In the final rule, all requirements for exit areas appear at § 205.241(b)(5). All requirements proposed at § 205.241(c)(2) have been moved to § 205.241(b)(5).

(Comment) AMS received several comments to eliminate the requirement that all birds within the house be able go through the exit areas within one hour. Comments stated the one-hour requirement would not be easy to verify. Other comments stated that verifying compliance by forcing birds outdoors would cause birds stress. Some comments suggested that AMS establish more specific requirements for exit areas, such as a minimum width, height, and number of doors per house. Comments argued that this would allow producers to design facilities that would absolutely meet the regulations and would allow certifiers to more easily verify compliance with specific requirements.

(Response) In the final rule, AMS has removed the requirement, as proposed, that exit areas be designed so that all birds within the house can go through the exit areas within one hour. AMS removed the one hour requirement, as it is not feasible for certifying agents to verify compliance with this requirement or take enforcement actions. AMS considered specifying the number and dimensions of exit doors, but decided that setting a clear performance standard for ready access to the outdoors is preferable to specific number and size requirements. In the final rule, AMS is establishing a clear performance standard so organic poultry producers will have the flexibility to design exit doors that provide ready access to the outdoors for birds, based on the design of the poultry house and the outdoor space. In any case, exit areas must: (1) Be sized to allow all birds to exit and enter the house, (2) be distributed to ensure birds have ready access to the outdoors, and (3) be designed and managed in a manner that prevents movement of wild birds, rodents, and other animals into the poultry house. Appropriate distribution ensures that all birds are close enough to a door to be able to readily gain access to the outdoors.

(Comment) AMS received comments on the distribution of exit areas on poultry houses. Some comments recommended AMS specify that exit areas must be provided on every side of the poultry house, while others suggested AMS clarify that exit areas are only required on sides of the house adjacent to the outdoor area. Other comments recommended that AMS specify a maximum distance between a bird inside and the nearest exit area.

(Response) To clarify the requirement, AMS has revised the phrase, ''distributed around the building.'' The final rule requires, ''Poultry houses must have sufficient exit areas that are appropriately distributed to ensure that all birds have ready access to the outdoors . . .'' This requirement is

reinforced at § 205.241(c)(1) which requires, ''door spacing must be designed to promote and encourage outside access for all birds on a daily basis.'' For some producers, it may be necessary to provide exit areas on all sides of a house to provide ''ready access to the outdoors'' and to ''promote and encourage outside access,'' as required under § 205.241(c)(1). However, other producers may be able to provide exit areas to meet the requirements without providing exit areas on every side of a house. The appropriate size, design, and distribution of exit areas on a building will be different for different types of buildings. Exit areas will need to be managed and maintained in a manner that complies with the FDA Egg Safety Rule (74 FR 33030, July 9, 2009).

4. Perches and Roosts

(Comment) AMS received many comments related to how the requirement for perches applies to broilers. Additionally, AMS received several comments about the perch requirement for turkeys, as well as comments about how the requirement will be determined for different species or breeds. We also received comments that noted that some types of poultry, including meat type chickens, will use perches when young but then stop using perches as their weight increases, preferring to spend time on flat surfaces at that time. Other comments noted that meat type chickens can sustain leg injuries moving between perches or roosts and the ground, especially if perches or roosts are too high off the ground.

(Response) In the final rule, AMS has not included a requirement for perch space for broilers or turkeys. The final rule specifies that six inches of perch space per bird is required for layers of species *Gallus gallus.* AMS may undertake further work on this topic, with the assistance of the NOSB, as appropriate.

(Comment) Some comments stated that the requirement of six inches of perch space per bird is excessive and that, at this rate, some perch space would be unused by birds. Other comments stated that all birds in a flock may not perch simultaneously and therefore six inches per bird is not necessary.

(Response) AMS recognizes that all birds in a house may not perch simultaneously. However, we have kept a requirement for six inches per layer in the final requirement. This requirement recognizes that each layer likely requires more than six inches per layer but that not all layers will be perching at the same time.

(Comment) We received many comments that AMS's terms ''perch'' and ''roost'' are confusing, as the terms can be used interchangeably by producers and industry. Other comments stated that the definition of ''roost'' in § 205.2 was too narrowly stated, as roosts are not always found over manure pits. One comment stated that the proposed requirement at § 205.241(b)(6) was too narrowly stated, as roosts in poultry houses can be flat, round, or oval. The comment suggested that AMS revise the requirement to simply state that roosts must allow birds to grip with their feet. Another comment suggested AMS change the term ''roost'' to ''slats'' in § 205.2 and maintain the same definition.

(Response) AMS recognizes that using both terms ''perch'' and ''roost'' could be confusing, as the terms can be used interchangeably by producers and industry. In the final rule, AMS has removed the term ''roost'' but retained the term ''perch'' in § 205.2. As defined, this term is intended to refer to various features in poultry housing, such as rods, branch type structures, and flat roost slats that accommodate roosting and are elevated to allow birds to stay off the floor of the house. Perches may be over a manure pit but this is not a requirement.

(Comment) AMS received a comment that questioned why the perch requirement is different for multi-tiered facilities than for other facilities.

(Response) We have included a perch requirement in multi-tiered facilities that is different from single-level facilities because multi-tiered facilities are designed to allow birds to utilize vertical space. Since birds in these facilities may move between levels to escape aggressive behaviors and engage in natural behaviors, less perch space per bird provides the same benefit.

5. Indoor Space Requirements

(Comment) AMS received many comments that AMS did not require enough indoor space. These comments argued that the requirements are similar to current space allowances used in the organic poultry industry and the rule would therefore not improve consumer confidence in the organic seal. Many comments recommended birds be provided with at least 1.5 square feet per bird, regardless of size. Other comments noted the requirements proposed by AMS fell short of the 2.0 square feet of indoor space recommended by the NOSB. Some comments stated AMS should not include different indoor space requirements for different types of production or housing systems (*e.g.,* pasture housing, aviary housing, slatted/mesh floor housing, floor litter housing). These comments suggested a single requirement for all housing systems.

(Response) In this final rule, AMS has included indoor space requirements that are based on pounds per square feet rather than square feet per layer. These requirements are equivalent to (for a 4.5 pound layer): 1.5 square feet per bird for floor litter housing; 1.2 square feet per bird for slatted/mesh floor housing; and 1 square foot per bird for mobile and aviary housing. The requirements were developed by considering the NOSB's recommendations, commonly-used third-party animal welfare standards, and current practices of certified organic producers. They were designed to balance the need for clear guidance that could be applied across different breeds and types of bird, the goal of safeguarding the value of the organic seal, and the cost of diverging significantly from common practice among organic operations certified to third-party animal welfare standards. AMS also determined that the indoor space requirements differ based on housing design. Less indoor space is required per bird in houses that provide more access to vertical space in the house, as birds have more room to move around (*e.g.,* aviary and slatted/mesh floor housing). Housing where birds have more limited access to vertical space (*e.g.,* floor litter housing) must provide more indoor space per bird. We have also allowed for higher stocking densities in mobile housing, as birds managed in these systems spend more time outdoors, and mobile housing must be relatively small and light because it is moved frequently.

(Comment) We received numerous comments that the indoor space requirement for turkeys was too large and did not align with current practices of organic turkey producers, including a comment that AMS did not take into account that houses are designed to ensure all turkeys have easy access to feed and water.

(Response) AMS proposed a maximum indoor stocking rate for turkeys of 5.0 pounds per square foot. AMS established the proposed space requirements for turkeys based on a preliminary recommendation included in a ''Proposed Discussion Document'' by the NOSB, which was presented at the NOSB's spring 2012 meeting.[11] The

[11] U.S. Department of Agriculture, Agricultural Marketing Service. ''NOSB Meetings.'' *https://www.ams.usda.gov/rules-regulations/organic/nosb/meetings.*

NOSB never issued a final recommendation to AMS on space requirements for turkeys. In the final rule, AMS has removed the specific space requirements for turkeys and other avian species in light of: (1) Numerous comments from turkey producers that the proposed stocking density requirements would have a major impact due to current industry practices; (2) the absence of an NOSB recommendation; and (3) information that the proposed requirements were more stringent than other third-party animal welfare standards. AMS intends to address space requirements for turkeys in future rulemaking. Producers of organic turkey and other avian species are still subject to all other requirements of the final rule, including all other indoor space requirements at § 205.241(b), outdoor space requirements at § 205.241(c), and the general requirements at § 205.241(a). This includes the requirement at § 205.241(b)(1) that, ''Poultry housing must be sufficiently spacious to allow all birds to move freely, stretch their wings, stand normally, and engage in natural behaviors.'' Certifiers should verify that producers are in compliance with these requirements. For example, producers that do not provide birds with outdoor access are not in compliance with the regulations, unless birds are temporarily confined in compliance with § 205.241(d).

6. Outdoor Space Requirements

(Comment) AMS received many comments that the outdoor space required for birds was not large enough. Comments noted that additional outdoor space would be required to ensure vegetation would not be removed entirely from the outdoor area. Some comments stated the size of the outdoor area was insufficient to prevent buildup of manure, which could lead to contamination of nearby surface water and of the soil in the outdoor area. Additionally, some comments stated that more outdoor area was required to ensure birds could be rotated around the outdoor areas since rotation serves important functions, including vegetation regrowth, parasite and disease reduction, and nutrient management. Further, AMS also received comments claiming that this rule would not protect small farmers and was more advantageous to larger producers. These comments remarked that the indoor and outdoor stocking density requirements for layers are weak which threatens consumer confidence in the organic label and continues the economic disadvantage for farmers using more stringent practices.

(Response) AMS recognizes that a larger outdoor area requirement than proposed could have benefits as described by comments. AMS, however, retained the proposed outdoor space requirement in the final rule. The requirement aligns with the recommendation by the NOSB and is established to meet consumer expectations while recognizing the land constraints that were raised by many other commenters (see below). AMS emphasizes that the regulations established here do not limit producers from providing a larger outdoor area for birds.

(Comment) Some comments stated the outdoor space required for poultry was too large. Specifically, some comments from producers noted that all birds in a house do not go outdoors at any one time and requested that AMS reduce the outdoor area requirement to recognize this observation. Several comments noted that producers may not have the amount of land required for outdoor space, or that the land available may not be near the barns, and that these producers would be forced to cease organic production.

(Response) AMS recognizes that an entire flock may not occupy the outdoor area at the same time, as a percentage of the flock may choose to remain inside, even when presented with the opportunity to go outdoors. However, AMS has not revised the outdoor space requirements in the final rule. The outdoor space requirements in the final rule ensure birds have adequate space outdoors if all birds in the flock do go outdoors. When all birds do not use the outdoor area simultaneously, the birds that are outdoors will effectively have more space per bird. This space requirement aligns with the recommendation by the NOSB. NOSB recommendations were guided by public comment that highlighted consumer expectations, or that sought to preserve the value of the organic seal to consumers. For further discussion of land availability and costs to producers, see discussion of comments below in section titled ''Assumption about Two Barn Footprints''.

(Comment) AMS received comments that stated the outdoor area required for turkeys was too large. Comments from some organic producers said they would need to increase the size of the outdoor area by 80 percent to meet the proposed requirement.

(Response) AMS proposed a maximum outdoor stocking rate for turkeys of 5 pounds per square foot based on a preliminary recommendation included in a ''Proposed Discussion Document'' by the NOSB, which was presented at their spring 2012 meeting.[12] In the absence of a final NOSB recommendation on space requirements for turkeys and in light of the numerous comments AMS received on the topic, AMS has removed the specific space requirements for turkeys in the final rule. AMS intends to address space requirements for turkeys in future rulemaking, once we have received additional input from the NOSB. Producers of organic turkey are still subject to all other requirements of the final rule, including all other outdoor space requirements at § 205.241(c), indoor space requirements at § 205.241(b), and the general requirements at § 205.241(a). Certifiers should verify that producers are in compliance with these requirements. For example, producers that do not provide turkeys with outdoor access are not in compliance with the regulations, unless birds are temporarily confined in compliance with § 205.241(d).

(Comment) AMS received several comments that the general requirement for ''adequate space to escape from predators and aggressive behaviors'' proposed in § 205.241(a) should be revised. These comments stated that space outdoors does not necessarily help poultry escape from predators and recommended that AMS remove the language ''escape from predators.''

(Response) In the final rule, AMS has revised the wording in this section to remove the requirement for adequate space to escape predators. This should not be interpreted to mean that AMS does not recognize the importance of birds having a place to escape from predators, but simply that outdoor space may not meet this goal. The section continues to require ''adequate outdoor space to escape aggressive behaviors . . .'' (§ 205.241(a)), as outdoor space may allow birds to escape from the aggressive behaviors of other birds in the flock.

(Comment) Some comments requested that we clarify calculations for birds kept in mobile housing units that provide direct contact with the ground. Comments asked whether birds in these production systems also require additional outdoor space.

(Response) See ''Pasture pens vs. other mobile housing'' comment and response.

7. Space Calculations—General

(Comment) AMS received many comments requesting that we describe

[12] U.S. Department of Agriculture, Agricultural Marketing Service. ''NOSB Meetings.'' *https://www.ams.usda.gov/rules-regulations/organic/nosb/meetings.*

the requirements for indoor and outdoor space using square feet per bird instead of setting a maximum pounds of bird per square foot, as AMS proposed. Comments stated that using square feet per bird would be more intuitive or easier to use when verifying compliance with the regulations.

(Response) AMS understands that it is simpler to think about space requirements on a per bird basis rather than as a number of pounds per square feet. However, AMS has not revised the description of the space requirements in the final rule, as pounds per square foot most fairly addresses differences between species and breeds. From comments received, AMS identified approximately half a dozen layer breeds commonly used for organic production, not including heritage breeds used by some organic producers. Each breed has slightly different characteristics, including the average weight per bird. By retaining the space requirements expressed as maximum pounds per square foot, AMS believes the requirement will be most equitable across species and breeds.

(Comment) Many comments discussed whether a porch could be calculated as either indoor or outdoor space. Some comments questioned when a porch could be included in calculations as either indoor or outdoor space (*i.e.,* whether access to the porch must be available at all times). Other comments opposed allowing porches as either indoor or outdoor space, stating that counting porches as indoor space would be a loophole that would result in less indoor space.

(Response) AMS disagrees with comments that space within a porch should never be allowed to count as space for birds. If a porch is always available to birds when inside, the porch space could be utilized by birds and the space should have the same benefits as other indoor space. However, if a porch is not accessible to birds at all times, it may not be included as indoor space. Space in porches may not be included in the calculation for indoor space if birds cannot access the porch for any reason, for example, if doors are closed due to inclement weather or threat of diseases. When calculating the space available to birds outdoors, only space that is outside an enclosed building or housing structure (see definition of ''outdoors'' at § 205.2), may be included as part of the outdoor area. However, in response to comments, AMS has added § 205.241(c)(7) to clarify that unenclosed porches and lean-to type structures (*e.g.* with roof, but with screens removed) that allow birds to access the rest of the outdoor area can be included in the calculation of outdoor space.

(Comment) Several comments requested that AMS clarify what was meant by ''at any time'' when referring to indoor and outdoor space requirements in §§ 205.241(b) and (c). Some comments thought that this section could be interpreted to mean that space requirements apply only to the birds in the outdoor area at a specific moment rather than to all birds in the flock. Comments noted that different interpretations of the phrase could influence the amount of space provided, as all birds in a house may not be outdoors at the same time.

(Response) In the final rule, AMS has revised the wording in §§ 205.241(b) and (c) to remove the phrase ''at any time'' and to clarify that space must be provided at the established rates for all birds in the flock. In § 205.241(c), we specified that outdoor space must be provided for all birds in the flock. We have not specified that indoor space is to be calculated for every bird in the flock, as all birds in a flock are regularly indoors at the same time and the method of calculating is clear.

(Comment) Some comments requested clarification about when birds should be weighed to calculate the indoor and outdoor space requirements. Other comments asked if the rule requires that birds be weighed to determine space requirements.

(Response) AMS notes that the space requirements are not linked to any specific age. At any time in a production cycle, producers must meet the requirements. For example, a layer in a floor litter housing system that is 32 weeks of age and weighs 4.3 pounds must be provided with 1.43 square feet per bird (equivalent to 3.0 pounds of bird for each one square foot); however, at 80-weeks of age and a weight of 4.5 pounds, each bird must be provided with 1.5 square feet per bird (3.0 pounds of bird for each one square foot). In other words, for each 10,000 square feet, a producer could stock 6,993 birds at 32 weeks of age (bird weight of 4.3 pounds) but only 6,667 birds at 80 weeks of age (bird weight of 4.5 pounds). Although older and heavier birds require more space, natural mortalities over time may result in compliance with the space requirements over a production cycle. To calculate the weight of birds, an average weight may be established for the flock by taking weights of a representative sample of the flock. The requirement is not specific to each individual bird in a flock. AMS understands that many producers already monitor and track bird weight closely during the production cycle to monitor bird development and health and calculate feed requirements. However, if weight is not monitored by a producer, the producer and/or certifier will need to establish the weight of birds based on objective criteria to determine the space required indoors and outdoors.

8. Space Calculations—Indoors

(Comment) Some comments requested clarification about whether the area occupied by nest boxes in poultry houses could be included in the calculation of the available indoor space.

(Response) In the final rule, AMS has clarified in § 205.241(b)(11) how indoor space is to be calculated and that nest boxes may not be included in the calculation of indoor space. This clarification aligns with the NOSB's December 2011 recommendation on indoor space, as well as with the methods for calculating indoor space used by animal welfare groups and third-party production standards. The total size of the indoor space is calculated by including all flat areas in a house, excluding nest boxes. Elevated round perches, for example, are not flat areas and could not be included as indoor space.

(Comment) We received some comments that asked what types of housing would be subject to the indoor requirement of 2.25 pounds of hen per square foot. Another comment stated that AMS could hinder innovation by implementing a stricter requirement (*i.e.,* more indoor space per bird) than for other types of housing defined in § 205.2.

(Response) AMS is not aware of housing that does not fit within one of our housing definitions included in § 205.2, and disagrees that the requirement would disadvantage any type or size production system. In the final rule, AMS continues to include an indoor space requirement at § 205.241(b)(8)(v) for housing that does not fit within one of the types defined in § 205.2 as ''indoors'' or ''outdoors.'' AMS also notes that requirements for new housing types could be included in the requirements at a later date, at the recommendation of the NOSB, as appropriate. If housing does not fit within one of the types described in § 205.2 and included at §§ 205.241(b)(8)(i) to (iv), producers must provide an indoor stocking density of no more than 2.25 pounds of hen per square foot.

9. Space Calculations—Outdoors

(Comment) Some comments requested that AMS clarify how to calculate the

outdoor stocking density. Comments asked whether producers could rotate birds around the outdoor area when this would result in a higher stocking density, as long as the stocking density as calculated over the entire outdoor area met the requirement.

(Response) The outdoor area requirement is to be calculated as the outdoor area available to all birds in the flock at any given time. For example, if a producer rotates birds between two outdoor areas, each area must be large enough to meet the stocking density requirement. Performing the calculation in this way ensures that birds are provided with the outdoor space required at all times. AMS has not revised the final rule in response to this comment.

(Comment) AMS received several comments about how the area of the outdoor space is to be calculated. Comments stated that AMS's intent to prohibit porches as outdoors was clear but that the proposed prohibition for including outdoor areas under a solid roof if attached to the structure was either confusing or overly restrictive. Some comments stated that large overhangs or other covered areas can actually encourage birds to go outdoors, as these areas provide a degree of safety for birds (*i.e.,* safety from aerial predators). Other comments mentioned that producers may create shade structures by leaning lumber against the side of building. Comments requested that AMS clarify that these areas are outdoors and can be included in outdoor space calculations.

(Response) AMS recognizes that overhangs, eaves, or other covered areas may encourage use of outdoor areas by providing overhead protection. In the final rule, AMS has removed the requirement as proposed at § 205.241(c)(6).

Additionally, AMS has revised the definition of ''outdoors'' to, ''Any area in the open air, outside a building or housing structure.'' AMS also revised the definition of ''indoors'' to, ''the space inside of an enclosed building or housing structure.'' Any outdoor space that meets the definition may be included in outdoor space calculations. AMS has also added § 205.241(c)(7), which clarifies that porches and lean-to type structures that are not enclosed, but allow free access to other outdoor areas can be counted in outdoor space calculations. These changes do not affect the decision that an enclosed porch cannot be counted as outdoor space. See AMS's response to comments on Definitions for further discussion.

(Comment) Some comments requested that AMS clarify whether producers must have outdoor areas if they only raise pullets and the pullets are sold or moved to another location prior to 16 weeks of age.

(Response) Section 205.241(d) includes requirements for temporarily confining birds from the outdoors. When birds are temporarily confined from the outdoors in compliance with the requirements at § 205.241(d), outdoor space is not required. To establish if confinement from the outdoors is in compliance with the requirements, a producer must, as required by § 205.201, ''develop an organic . . . system plan that is agreed to by the producer . . . and an accredited certifying agent.'' Beyond 16 weeks of age, all layer producers must have land available for outdoor access at the maximum stocking rate of 2.25 pounds per square foot, unless birds are temporarily confined in accordance with § 205.241(d). Producers may not confine birds in an indefinite manner to avoid or bypass outdoor space requirements.

10. Porches

(Comment) AMS received many comments that stated that porches should be considered as outdoor space in organic poultry production. Comments received in favor of porches as outdoor space argued that they allow producers to better protect bird health by reducing contact between organic birds and other animals that can carry disease (*e.g.,* wild birds, rodents, insects, cats, other animals); reducing contact between organic birds and pathogens in soil (*e.g.,* parasites, bacteria, viruses); and limiting predation. Additionally, many comments argued that production costs and, in turn, retail costs would increase if porches were prohibited. Some of the comments in favor of porches as outdoor space noted that porches also provide conditions similar to the outdoors (*e.g.,* sunlight, fresh air), and others stated that porches do in fact meet consumer expectations, as demonstrated by demand for organic eggs, many of which are produced in porch-based systems. Some comments in favor of porches recommended they be considered outdoor space for currently certified organic producers indefinitely. Another comment recommended that AMS allow porches as outdoor space but require enrichments on the porch to encourage birds to use porches.

AMS also received many comments that were opposed to any use of porches as outdoor space in organic production, including many comments stating they were unaware that currently, operations that provide porches as the only outdoor space for birds are allowed to be certified organic. Generally, these comments expressed that birds should be outside as much as possible on soil or on pasture with sunshine, fresh air, and adequate space in order to maximize opportunities for birds to exhibit natural behavior as recognized by animal welfare experts, consume a diverse diet, and meet consumer expectations for birds raised organically. Many stated that shoppers pay more for organic food and that animals should be raised in a manner that is more in line with consumer expectations, including access to soil and vegetated areas.

(Response) In the final rule, AMS has retained a requirement for outdoor access, and AMS has defined the outdoors (§ 205.2) to clarify that birds must be in the open air, outside an enclosed building or housing structure, to be considered outdoors. AMS disagrees with comments that argued that consumers are satisfied with the use of porches, or that demand for organic eggs is evidence of their satisfaction. AMS received a vast number of comments that indicate that consumers are unaware that porches have been used for outdoor access in organic production. The comments received indicate that there is a gap between how consumers think birds are raised on organic farms and the actual practices of some—but not all—organic producers. One of the key objectives in implementing this final rule is to assure consumers that the practices used to produce organic products meet a consistent standard, including outdoor access for poultry. This objective is guided by the NOSB recommendations and public and expert comment received during those deliberations that indicated a risk to the integrity and value of the organic seal from the gap between consumer expectation and current industry practice.

For further discussion of porches, including comments and cost impacts, see section XII, ''Porches as Outdoor Areas.''

11. Biosecurity

(Comment) A number of comments stated that the proposed rule would compromise biosecurity measures and increase exposure of birds to disease and infection by requiring access to the outdoors. Comments stated that there would be increased exposure of organic birds to wild birds and the feces of wild birds, which could harbor and transmit diseases. Additionally, comments noted the requirements would expose organic birds to more contact with soil, other animals (*e.g.,* rodents, cats), or insects

(*e.g.,* flies, ticks, mites, lice) that can harbor and transmit disease to domestic poultry. Comments stated that increased exposure to disease vectors, including viruses, parasites, and bacteria, would increase bird morbidity and mortality, negatively affect production, put other farms at risk, or force producers to decide between protecting bird health and maintaining organic certification. Comments noted that soil cannot be disinfected in the same way a house can be disinfected, which could lead to an increase in disease and mortality over time. Many comments stated that rearing birds in the controlled environment of a poultry house is best for bird health.

However, several comments also noted that confinement of poultry to the indoors is not a guarantee that birds will be protected from disease. A comment noted that in the 2015 outbreak of highly pathogenic avian influenza (HPAI) in the United States, the affected poultry farms were non-organic operations that permanently confine birds from the outdoors. Commenters urged AMS to consider that outdoor access is only one component of a comprehensive biosecurity plan and that factors other than outdoor access have been implicated in confirmed cases of HPAI (*e.g.,* cross-contamination due to persons or equipment moving between poultry houses or between farms).

(Response) In the final rule, AMS has retained the requirement for outdoor access for organic birds, but the Agency engaged in extensive deliberations to align these requirements with the best practices of federal agencies focused on biosecurity and food safety. Outdoor space requirements have also been retained for layers, pullets, and broilers of species *Gallus gallus.* AMS recognizes that certain conditions may require the temporary confinement of birds to protect bird health and prevent disease and has preserved the ability of producers to take these precautionary measures, in consultation with their certifiers. AMS believes that outdoor access should be provided when conditions do not jeopardize bird health, safety, or well-being and that outdoor access requirements can be factored into comprehensive biosecurity plans. Finally this rule does not obviate the necessity to comply with all other applicable laws and regulations, including animal health regulations of APHIS.

The final rule continues to allow producers to temporarily confine birds because of conditions under which the health, safety, or well-being of the animal could be jeopardized. This provision has been included to protect animal health. AMS also recognizes that specific disease risks may require temporary confinement to protect bird health, in the absence of a documented occurrence of disease. In response to comments, AMS has removed a provision from this section that would have required a documented occurrence of disease in the region or migratory pathway to temporarily confine animals. By revising the requirement, AMS is providing producers with additional options to address disease risks. This provision to temporarily confine birds must be part of an Organic System Plan approved by the producer's accredited certifying agent. Additional requests for temporary confinement, outside of the approved Organic System Plan, must be approved by the certifying agent. AMS encourages state departments of agriculture to coordinate with NOP and certifiers on occasions where temporary confinement may be necessary to protect animal health. See AMS's discussion of comments on ''Temporary confinement—disease'' for further discussion of confining animals under this provision.

12. Pasture Pens vs. Other Mobile Housing

(Comment) Several comments requested that AMS clarify how the regulations apply to poultry producers that use certain types of mobile pasture-based systems. The comments described these systems as providing direct access to soil and vegetation; having walls and roofs made of mesh, plastic, wood, and other materials; and having mobility. Birds in these systems are on pasture, however, roofing on all or part of the structure provides shade and protection. These comments argued that these systems should meet the definition of outdoors because they provide access to soil and vegetation and allow for natural behaviors (scratching, pecking, foraging, etc.).

(Response) For further discussion, see AMS's response to comments in the Definitions section. AMS made several revisions in the final rule in response to comments requesting more clarity around the definitions of indoors and outdoors as they apply to pasture-based systems. We revised the definition of outdoors in § 205.2 to clarify that pasture pens are outdoors. Additionally, we use the term ''mobile housing'' in § 205.241(b)(8)(1) of the final rule to distinguish pasture pens from mobile housing. Mobile housing provides indoor space while pasture pens are considered outdoors.

Birds raised in pasture pen systems must be provided with space to meet outdoor space requirements at §§ 205.241(c)(4) through (6); specifically, space for chickens must be provided at a rate of no less than one square foot for every 2.25 pounds of layer, 3.0 pounds of pullet, or 5.0 pounds of broiler in the flock. Species other than chickens must be provided with outdoor space to meet the requirements of §§ 205.241(c)(1) through (3). AMS has determined that this type of production, which provides animals with constant access to pasture, also meets consumer expectations of organically produced birds, and expects that the outdoor space requirement ensures birds in these systems have sufficient space to express natural behaviors and meet the requirements of § 205.241(a).

13. FDA Regulations and Food Safety

(Comment) AMS received numerous comments stating that the proposed rule would compromise egg producers' efforts to prevent *Salmonella enterica* serotype Enteritidis (SE) from contaminating eggs, as required by FDA regulations (21 CFR part 118). FDA requirements include: preventing stray poultry, wild birds, cats, and other animals from entering poultry houses; using appropriate methods to control rodents and flies (when monitoring indicates unacceptable activity); and removing vegetation and debris outside a poultry house that may provide harborage for pests (21 CFR 118.4). Comments stated the AMS requirements for outdoor access and for enrichments in outdoor areas would conflict with current FDA requirements to prevent SE.

(Response) AMS engaged in extensive deliberations to reduce the likelihood that requirements under this rule would jeopardize or impact practices that poultry producers have implemented to meet FDA requirements to prevent SE (21 CFR part 118) published on July 9, 2009 (74 FR 33030). Under the FDA requirements, producers must have and implement a written SE prevention plan and take measures to prevent introduction or transfer of SE into or among poultry houses (21 CFR 118.4). Under FDA regulations, the minimum requirements to prevent SE include, but are not limited to: preventing stray poultry, wild birds, cats, and other animals from entering poultry houses; and removing debris within a poultry house and vegetation and debris outside a poultry house that may provide harborage for pests. Enrichments in the outdoor area could provide harborage for rodents, and thus, could conflict with FDA requirements at 21 CFR 118.4(c)(3).

In the final rule, AMS has removed the proposed requirement, ''outdoor areas must have suitable enrichment to entice birds to go outside.'' This requirement has been removed in the final rule to remove conflict with FDA rules to prevent SE contamination. Section 205.241(c)(1) requires that ''outside access and door spacing must be designed to promote and encourage outside access for all birds on a daily basis. Producers must provide access to the outdoors at an early age to encourage (*i.e.,* train) birds to go outdoors.''

Additionally, AMS has amended the rule at § 205.241(c)(2) to require at least half of the outdoor area to be soil with vegetative cover, which encourages birds to come outdoors and accommodates natural behaviors. Organic producers must ensure that vegetation does not provide harborage to pests, as required under FDA requirements (21 CFR 118.4(c)(3)). For example, vegetation in outdoor areas must be kept at a short enough height to ensure it does not harbor pests. FDA draft guidance [13] recommends that vegetation should be maintained to less than 6 inches in height.

(Comment) Comments also stated that doors, as required by AMS, would directly conflict with the FDA requirement to prevent stray poultry, wild birds, cats, and other animals into poultry houses. Comments stated that any door to allow organic birds to move between the indoors and outdoors would inevitably lead to the movement of other animals between the outdoors and indoors, and that failure to prevent this movement would conflict with the FDA requirements.

(Response) The FDA SE rule includes required measures to prevent SE contamination, including biosecurity and pest control measures (21 CFR part 118). Under this final rule, organic producers must provide access to the outdoors (§§ 205.241(a), 205.241(c)(1)). To also comply with FDA requirements, organic producers need to take measures to prevent wild animals and pests from moving freely between the outdoors and indoors. For example, producers could: use visual deterrents to discourage wild birds in or around housing; set traps for pests outdoors and indoors; use perimeter fences to keep stray or wild animals out of outdoor areas; reduce access to feed indoors by managing spilled feed; or design exit areas on housing to prevent wild birds from entering the house.

(Comment) Several comments noted that soil can be contaminated with persistent synthetic chemicals, including dioxins, and specifically, polychlorinated dibenzo-*p*-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs), and polychlorinated biphenyls (PCBs). The comments noted that the requirement for birds to be outdoors on soil would result in elevated levels of these substances in organic eggs—through ingestion of soil or vegetation by birds—and subsequently pose health risks to humans that ingest organic eggs. Comments noted that dioxins are widespread and persistent in the environment, and comments cited studies that found that eggs from free range hens contain higher levels of dioxins. Additionally, comments noted risks of bioaccumulation into eggs of heavy metals such as lead and mercury, as well as DDT, when birds are outdoors on soil.

(Response) No provision under this rule allows for the sale of eggs that contain substances—including dioxins, heavy metals, and PCBs—in excess of levels established by the FDA or other agencies. This rule does not change the requirement that producers, regardless of whether or not they are organic, must comply with FDA requirements. Additionally, organic regulations at § 205.671 address unavoidable residual environmental contamination (further defined at § 205.2) and do not allow for the sale of contaminated agricultural products as organic. For more information on action levels published by the FDA, see FDA's Guidance for Industry: Action Levels for Poisonous or Deleterious Substances in Human Food and Animal Feed.[14]

14. Vegetation in Outdoor Areas

(Comment) AMS received many comments stating that vegetation should be required in outdoor areas for birds. Comments noted that vegetation is important for birds to engage in the natural behavior of foraging and that denuded soil increases health risks for flocks. Additionally, comments noted that vegetated soil benefits soil and water quality compared to bare soil by reducing water runoff, preventing erosion, and taking up nutrients. Most comments recommended the outdoor area be covered with at least 50 percent vegetation, while some comments recommended AMS require up to 90 or 100 percent vegetative cover in outdoor areas.

(Response) AMS agrees that vegetation in outdoor areas has benefits that warrant this requirement. We have revised the final rule at § 205.241(c)(2) as follows: ''at least 50 percent of outdoor space must be soil. Outdoor space with soil must include maximal vegetative cover appropriate for the season, climate, geography, species of livestock, and stage of production . . .'' This requirement recognizes the important function and role of vegetation in the outdoor space, including its benefits to soil health and to birds by allowing for the expression of natural behaviors. Vegetation in outdoor areas must be maintained to ensure it does not provide harborage for rodents and other pests. For example, vegetation in outdoor areas must be kept at a short enough height to ensure it does not harbor pests. FDA draft guidance recommends that vegetation should be maintained to less than 6 inches in height.[15]

Additionally, AMS has included at § 205.241(d)(4) an allowance to temporarily confine birds for ''risk to soil or water quality, including to establish vegetation by reseeding the outdoor space.'' Birds may not be confined any longer than required to seed the area and allow for the vegetation to establish itself. This allowance for temporary confinement was included by AMS to acknowledge that some producers may need to reseed outdoor areas to meet the vegetation requirement included in § 205.241(c)(2) and that birds may need to be kept off the area to allow seeds to germinate and establish. The minimum outdoor space requirements do not apply when birds are temporarily confined under this provision, and a producer may still allow birds outdoors. For example, if 50 percent of the outdoor area is covered by gravel, birds may be allowed into this portion of the outdoor area. Providing a smaller outdoor area when confining animals to reseed the outdoor area and establish vegetation would be in compliance with the provision at § 205.241(d)(4).

(Comment) AMS received a number of comments that contact with gravel or pavement does not allow chickens to exhibit their natural instinctive behaviors. Many comments requested we reduce the amount of outdoor area that can be anything but soil (including soil with vegetative cover) from 50 percent to 25 percent or less.

[13] U.S. FDA. Draft Guidance for Industry: Questions and Answers Regarding the Final Rule, Prevention of Salmonella Enteritidis in Shell Eggs During Production, Storage, and Transportation (Layers with Outdoor Access). Available at *http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/ucm360028.htm.*

[14] *http://www.fda.gov/food/guidanceregulation/ucm077969.htm.*

[15] *http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/ucm360028.htm.*

(Response) AMS has retained the requirement as proposed that outdoor areas be at least 50 percent soil, but we have also revised the requirement to add a requirement for maximal vegetative cover in the outdoor soil area. We think this revision communicates the importance of contact with the ground yet still provides an allowance for producers to use other surfaces as necessary. For example, gravel surfaces may be necessary to ensure adequate drainage adjacent to a house. A producer could still provide a surface or materials in this outdoor area that would accommodate the natural behavior of birds, including scratching and dust bathing.

(Comment) AMS received many comments about whether vegetation would be permitted in outdoor areas, since the proposed rule stated at section 205.241(c)(8), ''At least 50 percent of outdoor access space *must be soil*''. Comments stated that bare soil could lead to degradation of soil and the runoff from bare soil could contaminate nearby water resources.

(Response) AMS understands from comments received that there was confusion about whether outdoor areas could be vegetated or if AMS would require outdoor areas to be cleared of vegetation. In the final rule, AMS has revised the outdoor space requirement to clarify that outdoor soil areas must be covered with vegetation given site-specific conditions.

(Comment) AMS received a few comments about whether land used for outdoor access for poultry must be certified organic and meet the same requirements as land used in the production of organic crops or pasture. One comment recommended that producers not be allowed to remove the top soil from the outdoor area and replace it with another fill material to forego the land transition period requirement (*i.e.,* a three-year period without prohibited synthetic substances).

(Response) AMS agrees that land used to provide outdoor access to poultry must be certified as part of an organic system plan. The USDA organic regulations require that organic agricultural products fed to livestock be organically produced. Additionally, the regulations require that crops be produced from land to which no prohibited substances, including synthetic chemicals, have been applied during the three years immediately preceding the harvest of the agricultural product. As birds may consume vegetation from land used to provide outdoor access, this land must meet the same requirements as used to produce any other organic crop. The implementation period for this final rule takes into account the possibility that producers may need to transition land to meet outdoor space requirements.

15. Enrichments and Bird Training

(Comment) AMS received many comments that the requirement for ''suitable enrichment'' in outdoor areas was too subjective. Some comments recommended AMS remove this part of the requirement, while other comments recommended AMS specify the number and types of enrichments required. Many other comments noted that enrichments outdoors would attract other animals and violate FDA requirements for shell egg producers to prevent SE contamination of eggs. Some comments requested AMS clarify how the requirement for suitable enrichment outdoors applies to broiler production.

(Response) In response to comments, AMS has removed the requirement that outdoor areas must have suitable enrichment to entice birds to go outside in the final rule. See AMS's response to comments about FDA regulations in the section above on FDA regulations and food safety. AMS has, however, amended the rule at § 205.241(c)(2) to require at least half of the outdoor area to be soil with vegetative cover, which provides an environment that encourages birds to come outdoors. Additionally, we have retained the requirement in the final rule that outside access and door spacing be designed to promote and encourage outside access for all birds on a daily basis. Producers must still meet the general requirements of § 205.241(a) and provide living conditions that accommodate the health and natural behavior of birds, including: year-round access to outdoors; shade; shelter; exercise areas; fresh air; direct sunlight; clean water for drinking; materials for dust bathing; and adequate outdoor space to escape aggressive behaviors.

(Comment) Several comments noted that suitable enrichments should be required indoors for broilers. A comment stated that perches are of questionable benefit to broiler-type birds and that a general requirement for indoor enrichment for broilers would be beneficial. A comment recommended that beneficial indoor features might include straw bales, string, deep litter, and dust baths.

(Response) In the final rule, AMS has not included a perch or indoor enrichment requirement for broilers. AMS may undertake further work on this topic, with the assistance of the NOSB, as appropriate. However, broiler producers must meet the requirement at § 205.241(b)(1), which requires that birds be able to engage in natural behaviors indoors. Producers should work with their certifier to determine if birds are able to engage in natural behaviors indoors.

(Comment) Several comments noted the benefits of covered areas in the outdoor space for birds and recommended AMS require these features in outdoor areas. Comments noted that birds will be encouraged to go outdoors if they can seek and find safety from overhead predators under trees, roofs, or other structures.

(Response) AMS agrees that protection from predators could be important to encourage birds to use outdoor areas. Furthermore, overhead protection could reduce mortality by reducing predation. However, in the final rule, AMS has not included a specific requirement to provide covered areas outdoors. Producers are required to promote and encourage outside access in the final rule (§ 205.241(c)(1)), and overhead protection may be used to meet this requirement. However, AMS has not specified exactly how producers must promote and encourage outside access. We believe this flexibility is important to allow producers to implement practices that are best suited to their operations, while still establishing a clear standard for producers to promote and encourage outdoor access and while protecting birds from disease and predation.

16. Temporary Confinement—Weather

(Comment) AMS received many comments about temporary confinement for air temperatures that are under 40 °F or above 90 °F. One comment stated that allowing birds to go outdoors at 40 °F would cool down the barn quickly and create moisture issues. Other comments noted that additional fuel would be required to maintain indoor temperatures if doors were opened during cool weather and that birds would require more feed to compensate for the energy required to maintain their body temperature. Comments on the upper limit proposed by AMS noted that cooling systems in poultry houses would not work as designed with doors open, and that birds would be subjected to additional stress that could result in higher incidence of illness or death. Some alternate recommendations for the temperature range were 55–90, 50–90, 60–90, and 50–85 °F. Meanwhile, some comments supported removing any lower or upper limits and instead defining inclement weather. Additionally, several comments requested AMS clarify if producers are required to provide birds with access to

the outdoors if the temperature is only within the range of 40 °F and 90 °F for a short period of time in the day. Comments stated that such a requirement could be impractical for producers that may not be available to open doors at any time on a given day.

(Response) Organic regulations already include a definition of the term ''inclement weather'' at § 205.2 In the proposed rule, AMS did not suggest changes to this definition, but we did propose to include a specific temperature range, outside of which producers could temporarily confine birds. The temperature range was proposed to ensure consistent practices between producers for temporarily confining birds due to weather. However, as noted by comments, temperature alone is not necessarily an indicator of inclement weather. For example, humidity can amplify the effect of high temperatures. Information from one poultry breeding company indicates birds experience extreme heat stress at a temperature of 82 °F when the relative humidity exceeds 75 percent. However, at 20% relative humidity, birds experience a similar degree of heat stress once the temperature reaches 100 °F.[16]

The final rule allows for temporary confinement of birds for, ''inclement weather, including when air temperatures are under 40 °F or above 90 °F.'' AMS notes that weather may still qualify as inclement weather (§ 205.2) even within this temperature range. For example, excessive precipitation and very violent weather can occur when temperatures are within 40 °F and 90 °F. Likewise, weather may meet the definition of inclement weather within the range of 40 °F and 90 °F if the relative humidity is very high and the air temperature is nearing 90 °F, or under extremely windy conditions. As inclement weather is defined as weather than can cause physical harm to a species, a producer would still be in compliance with § 205.241(d)(1) if birds were confined at temperatures that did not exceed 90 °F but when the weather could cause physical harm.

17. Temporary Confinement—Stage of Life

(Comment) AMS received comments that layers should be required to go outdoors before 16 weeks of age. Other comments noted that pullets can be moved from dedicated pullet rearing facilities to dedicated layer houses when pullets are older than 16 weeks; these comments also requested additional time to allow for confinement until pullets are moved to layer houses. One comment cited that the allowance for 16 weeks of temporary confinement conflicts with AMS's proposed requirement at § 205.241(c) that producers, ''provide access to the outdoors at an early age to encourage (*i.e.,* train) birds to go outdoors.'' Comments noted at least one study that found birds used outdoor areas more when allowed outdoor access earlier in life. Some comments noted that layers are fully feathered around 8 weeks of age and should therefore be provided with access to the outdoors at 8 weeks of age.

(Response) The final rule allows producers to temporarily confine layers for up to 16 weeks of age. AMS agrees that 16 weeks of confinement from the outdoors is not always required. In fact, many organic producers already provide outdoor access for layers prior to 16 weeks of age. AMS also recognizes, however, that many layer operations use vaccination programs to protect bird health and prevent disease, and in many cases, birds receive vaccines during the first 16 weeks of life. Requiring outdoor access before this age could compromise bird health. Birds that are over 16 weeks of age may not be confined under the provision at § 205.241(d)(2(ii). Any confinement of birds beyond 16 weeks of age must be done only in accordance with other provisions at § 205.241(d). In any case, producers must describe their practices for confining birds in their Organic System Plan, and certifiers must approve these plans.

(Comment) AMS received several comments that turkeys are not ready to go outdoors by four weeks of age, as proposed by AMS, because full feather plumage is not complete until approximately seven weeks of age. The comments requested turkeys be addressed specifically in the regulations, as turkeys have different requirements than chickens or other bird species.

(Response) AMS recognizes that turkeys may require a longer period of time than chickens for feather development. In response to comments, AMS has revised the final rule at § 205.241(d)(2)(iii) to allow temporary confinement of turkeys and other species until fully feathered. The requirement for chickens (*Gallus gallus*) remains unchanged from the proposed rule and allows temporary confinement for the first 4 weeks of life for broilers and the first 16 weeks of life for pullets.

18. Temporary Confinement—Disease

(Comment) AMS received many comments about temporary confinement for bird health, safety, or well-being at § 205.241(d)(3). Specifically, comments showed concern that the requirement for a documented disease in the region or relevant migratory pathway would compromise a producer's ability to proactively confine animals to prevent exposure of a flock to disease. One comment suggested that AMS allow birds to be kept inside when there is a reasonable expectation of disease that can rapidly spread through poultry. Another comment suggested that detection of a disease, rather than occurrence of a disease, should be sufficient grounds to confine birds. Other comments urged AMS to allow confinement when recommended by a State or Federal animal health official. Additionally, comments stated that the terms ''region,'' ''migratory pathway,'' and ''documented occurrence'' were not clear and could lead to varying interpretations, including extended periods of confinement for birds in the absence of real risk. One comment suggested that AMS remove references to ''region'' and ''migratory pathway'' and allow confinement only in the case of a current local occurrence of a disease.

(Response) The organic livestock and poultry standards allow temporary confinement of poultry for ''conditions under which the health, safety, or well-being of the animal could be jeopardized.'' In the case of risks posed by highly contagious and rapidly spreading disease, AMS recognizes that it is complicated to precisely assess disease threats, and AMS recognizes that various animal health experts, including State and Federal officials, serve important roles in monitoring disease threats and communicating those threats to producers. In response to comments, AMS has revised the final rule to provide additional flexibility for confining animals to prevent the spread of disease and protect bird health. To temporarily confine birds under this provision, producers must be able to demonstrate that the birds' health, safety, or well-being are jeopardized by access to the outdoors. Plans to temporarily confine birds must be part of the producer's organic system plan approved by the certifying agent. Producers must keep records of confinement and records to justify confinement (see §§ 205.103 and 205.241(d)).

[16] *http://www.hyline.com/userdocs/pages/TB_HEAT_ENG.pdf.*

19. Temporary Confinement—Nest Box Training

(Comment) AMS received several comments that the allowed period (2 weeks) for confining birds for nest box training (*i.e.,* to train birds to lay eggs in designated nest areas) was inadequately short. Comments stated that additional time was required to ensure birds would lay eggs in nest boxes. Comments stated that more time than proposed would reduce the number of eggs laid outside of nest boxes and the time required to collect these eggs. Comments also noted that eggs laid outside of nest boxes could be more at risk of *Salmonella* contamination through direct contact with manure and dirt. Some comments suggested that AMS modify the requirement to allow as much time as required for birds to reach a certain percentage of the total expected egg production. For example, a comment suggested we allow birds to be confined for nest box training until at least 80 percent of the expected daily egg production could be documented. Other comments recommended increasing the allowed time period to three or four weeks, while others recommended a period of six to eight weeks for nest box training.

(Response) AMS recognizes that nest box training is important, as it reduces eggs laid outside of nests; simplifies management; and reduces contact between eggs and manure, dirt, and other substances. AMS understands that different species and breeds may require different amounts of time for nest box training. In response to comments, AMS has revised the final rule to align with the NOSB's recommendation. Birds may be confined to train birds to use nests, but the period must not exceed five weeks.

20. Temporary Confinement—Other

(Comment) One comment recommended AMS add the word ''temporarily'' to the last sentence of § 205.241(d) to be clear that confinement cannot be permanent or lasting (see definition of ''temporary and temporarily'' in § 205.2).

(Response) AMS agrees with the comment, and we have revised § 205.241(d) to clarify, ''Operations may *temporarily* confine birds'' for reasons at § 205.241(d).

(Comment) AMS received several comments that the proposed requirement ''each instance of confinement must be recorded'' was unnecessary. Comments cited the existing requirement for recordkeeping and did not think it was practical or reasonable to require producers to record every single instance of confinement, such as every time birds were put inside at night. Some comments noted that producers have written standard operating procedures that describe when birds are confined and this would serve as a sufficient record of confinement.

(Response) AMS agrees that the value of requiring producers to record each instance of confinement may be limited, especially when the confinement is routine, such as confinement of birds inside a poultry house at night for the birds' safety. However, AMS thinks it is also important that certifiers be able to readily assess a producer's compliance with the regulations. By requiring producers to record each instance of confinement, certifiers can easily identify instances of confinement, including the reason for confinement. These records can then be reviewed with third-party information to verify the reason for confinement. For example, a certifier can check weather information for the area to confirm there was inclement weather on the dates when animals were confined or confirm the occurrence of a disease in the region for that time. Meanwhile, AMS has been promoting recordkeeping requirements for organic producers (*i.e.* Sound and Sensible [17] initiative), aimed at making organic certification more accessible, attainable, and affordable while maintaining high standards, ensuring compliance, and protecting organic integrity. AMS agrees that the proposed requirement at § 205.241(d) to record each instance of confinement may not result in records that would help certifiers ensure compliance. In the final rule, AMS has revised § 205.241(d) to clarify that confinement must be recorded. Producers do not need to record each instance of confinement if the producer has described the reasons for routine temporary confinement (*i.e.,* a standard operating procedure) in their Organic System Plan. For example, a producer may describe that birds are confined nightly, or that pullets are confined until 8 weeks of age, in their OSP instead of recording these instances of confinement on a daily basis. AMS notes that producers must also comply with § 205.103, including § 205.103(b)(4) which requires records be sufficient to demonstrate compliance with the regulations. If a certifier determines that the description of practices in the producer's standard operation procedure, for example, are not sufficient to demonstrate when birds are actually confined, the certifier may require as a corrective measure that the producer modify their standard operation procedure or keep records that will be sufficient to demonstrate animals are provided with outdoor access in compliance with the regulations.

(Comment) AMS received a comment that producers should be required to provide additional indoor space if poultry are confined for more than one week. The comment suggested that AMS require indoor space equivalent to the total combined indoor and outdoor space that is otherwise required when birds are not temporarily confined.

(Response) AMS recognizes that the total space per bird is reduced when birds are temporarily confined. However, producers are not able to predict events that require temporary confinement, such as disease outbreaks. If it were necessary to confine animals for more than one week, a producer may need to cull perhaps half of the entire flock in order to meet the requirement proposed by the commenter. In cases where birds could not be sold as organic, the financial loss to producers would be great, or a producer could be forced to destroy a large portion of the flock. AMS does not think this is warranted for circumstances that are beyond a producer's control.

(Comment) AMS received a comment that the period for temporary confinement for youth projects following the conclusion of a fair or demonstration should be extended from 24 hours to one week, to ensure that birds are healthy and will not pass any sickness or disease acquired at these events to other birds.

(Response) The final rule maintains an allowance to confine birds up to 24 hours after the birds have arrived home at the conclusion of a youth event. However, AMS notes that birds may be temporarily confined for a longer period of time in accordance with § 205.241(d)(3), which allows for temporary confinement because of conditions under which the health, safety, or well-being of animals could be jeopardized. Producers must describe their practices in their organic system plan and work with their certifier to ensure that temporary confinement practices meet the requirements.

21. Soil and Water Quality

(Comment) AMS received comments that increased outdoor access could contaminate water systems, as a result of birds being outside on soil. Comments stated that water runoff from outdoor areas containing manure would need to be managed to comply with U.S. Environmental Protection Agency

[17] *https://www.ams.usda.gov/report-presentation/sound-sensible.*

(EPA), state, or local requirements. Comments stated that compliance could require landscape modifications, such as installation of berms or drainage systems around poultry barns. These modifications could be expensive and burdensome, as they can require federal and state permits.

(Response) An overarching requirement of organic production is that soil and water quality be maintained or improved (7 CFR 205.200). To minimize potential impacts to soil or water quality from livestock with outdoor access, AMS has included a requirement in the final rule for vegetation in outdoor areas (§ 205.241(c)(2)). Vegetation acts to hold soil, reduce water runoff, and take up nutrients deposited in animal feces. Clean Water Act National Pollutant Discharge Elimination System (NPDES) permit requirements for concentrated animal feeding operations do not encompass outdoor areas that have vegetation in the normal growing season. (*See* 40 CFR 122.23(1)(ii)). Therefore, AMS does not expect this rule would adversely alter an organic operation's status or costs of compliance with respect to EPA regulations for concentrated animal feeding operations, nor does it expect the rule to subject operations to additional requirements. This rule does not affect NPDES compliance requirements for other aspects of the poultry growing areas. Other federal, state, or local regulatory requirements may apply to the facilities as well.

(Comment) AMS received comments that requiring birds to be outside on soil would lead to contamination of soil due to excess nutrients from manure. Comments requested that AMS not require outdoor access.

(Response) AMS recognizes concerns about impacts to soil quality, and the final rule includes provisions to protect soil quality. However, AMS disagrees with comments that soil quality should be addressed by removing the requirement for outside access altogether. In the final rule, § 205.241(e) requires producers to manage manure in a manner that does not contribute to contamination of crops, soil, or water. Section 205.241(d)(4) allows for temporary confinement of birds because of risk to soil quality. Each producer will need to manage soil quality as appropriate to their climate, soil type, and size of outdoor area. AMS notes that managing soil in outdoor areas may also include feed management, as excess nutrients provided in feed are excreted by birds. Producers may attain resources and assistance with feed management and manure management by contacting the USDA's Natural Resources Conservation Service (NRCS).[18]

22. Other Comments—Avian Living Conditions

(Comment) AMS received several recommendations to include requirements for slow-growing poultry breeds or for breeds that are suited to free-range conditions. Some comments recommended that AMS set a minimum age at slaughter or a maximum daily growth rate requirement to ensure sustainable weight gain and animal health.

(Response) AMS has not included a requirement for slow-growing breeds or minimum age requirements for slaughter in the final rule. AMS agrees that this topic may deserve further attention and input from stakeholders, and we may ask the NOSB to explore this topic.

(Comment) AMS received comments that current organic regulations require access to the outdoors and that these new rules are not necessary for AMS to require outside access or for AMS to prohibit porches as outside access. The comments cited existing regulations at § 205.239(a)(1), which include a requirement that producers establish and maintain ''year-round access for all animals to the outdoors . . . Continuous total confinement of any animal indoors is prohibited.''

(Response) AMS acknowledges that current organic regulations require outdoor access for poultry, but we disagree with the argument that current regulations could achieve the same results as the regulations revised by this final rule. As recommended by the NOSB, AMS is implementing this final rule to establish specific regulations for the care of livestock, as authorized under OFPA (7 U.S.C. 6509(d)(2)).

(Comment) Some comments stated that the requirements in § 205.241(b)(1) and § 205.241(b)(11) were duplicative and that the sections should be combined in a single requirement to streamline the requirements.

(Response) AMS agrees with these comments and has moved the text from § 205.241(b)(11) as proposed to § 205.241(b)(1). We have removed the originally proposed text at § 205.241(b)(1) in the final rule.

(Comment) A comment suggested moving the requirement on litter at § 205.241(b)(4)(iii) to clarify that the requirement applies to all types of poultry houses and not just houses with slatted or mesh floors.

(Response) AMS agrees with the comment that the requirement, ''litter must be provided and maintained in a dry condition,'' proposed at § 205.241(b)(4)(iii) is more appropriately placed as a standalone requirement. In the final rule, this requirement has been moved to § 205.241(b)(6).

(Comment) A comment noted that proposed § 205.241(b)(4)(i), which allows, ''mesh or slatted flooring under drinking areas to provide drainage,'' was unnecessary and did not actually impose a requirement since the section only states this type of flooring ''may'' be used.

(Response) AMS agrees that the allowance for mesh or slatted flooring under drinking areas is not necessary, as nothing else in the requirements prohibits use of mesh or slatted flooring under drinking areas. We have included a separate requirement to maintain litter in a dry condition. In the final rule, AMS has removed § 205.241(b)(4)(i) as proposed. Additionally, AMS has removed § 205.241(b)(4) of the proposed rule, and moved the requirement proposed at § 205.241(b)(4)(ii) to § 205.241(b)(7). The requirements on scratch areas, dust baths, and litter now appear at §§ 205.241(b)(6) and (7).

(Comment) Some comments asked for clarification on the meaning of the term ''litter'' as used in the avian living section. Comments stated that it was not clear if producers are required to add litter material for birds or if dehydrated manure would suffice without any additional litter. Another comment recommended AMS use the term ''bedding'' in place of litter, as this term is used elsewhere in the regulations.

(Response) AMS has used the term ''litter'' in § 205.241, as this term is commonly used by avian producers. The term has not been further defined in § 205.2. Litter includes substrates used to absorb moisture and dilute manure. Litter also provides birds with the opportunity to dust bathe and to express foraging and scratching behaviors. Common types of litter include wood shavings or chips, straw, rice hulls, and sand. The final rule at § 205.241(b)(6) requires that litter be provided and maintained in a dry condition. AMS has not specified the amount of litter that must be provided. However, the rule does require that litter be provided. An absence of litter would not be in compliance with this requirement. Litter should be provided in amounts required to absorb moisture, dilute manure, and to allow birds to express natural behaviors such as dust bathing, foraging, and scratching.

(Comment) Some comments stated AMS's requirements were not based on scientific evidence and appeared to be made by AMS arbitrarily, including the

[18] *http://offices.sc.egov.usda.gov/locator/app.*

specific indoor and outdoor space requirements for birds.

(Response) The provision on indoor and outdoor space requirements in this rule are based on nine separate NOSB recommendations submitted to the Secretary. In developing these recommendations at their public meetings, the NOSB considered technical information and public comments, including comments from organic livestock producers, animal welfare experts and the scientific community. AMS is establishing these requirements, in consideration of the NOSB's recommendations, to assure consumers that organically produced products meet a consistent standard.

X. Transport (§ 205.242(a))

A. Description of the Final Rule

1. Summary of the Final Rule

New § 205.242(a)(1) requires that animals are clearly identified during transport. AMS's approach requires that animals are clearly identified but provides flexibility on how the identity is maintained during transport.

New § 205.242(a)(2) sets minimum fitness requirements for livestock to be transported. Section 205.242(a)(2)(i) requires that calves have a dry navel cord and the ability to stand and walk without assistance, if they are to be transported. This provision would apply to transport to buyers, auction facilities, or slaughter facilities. Beef cattle and dairy cattle producers may transport calves on the farm before the navel is dried and the calves can walk. Section 205.242(a)(2)(ii) prohibits transport of non-ambulatory animals to buyers, auction facilities, or slaughter facilities. These animals may either be given medical treatments and cared for until their health conditions improve, so that they are able to walk, or they may be euthanized.

New §§ 205.242(a)(3) and (4) set minimum standards for the trailer, truck, or shipping container used for transporting organic livestock. The mode of transportation is required to provide seasonal-appropriate ventilation to protect animals against cold or heat stress. This provision requires that air flow be adjusted depending on the season and temperature. In addition, bedding is required to be provided on trailer floors as needed to keep livestock clean, dry, and comfortable. If roughage is used as bedding, the bedding needs to be organically produced and handled. Bedding is not required for poultry crates.

Section 205.242(a)(5) requires that all livestock be provided with organic feed and clean water if transport time exceeds 12 hours. The 12-hour time period includes all times during which the animals are on the trailer, truck, or shipping container, even if these modes of transportation are not moving. In cases such as poultry slaughter in which requirements do not allow feed 24 hours before slaughter, producers and slaughter facilities need to ensure that transport time does not exceed 12 hours. After 12 hours of transport, the birds would need to be fed, which may prolong the time to slaughter. The certified operation must present records—which verify that transport times meet the 12 hour requirement—to the certifying agent during inspections or upon request.

New § 205.242(a)(6) requires that operations that transport livestock to sales or slaughter have emergency plans in place that adequately address problems reasonably possible during transport. Such emergency plans could include how to provide feed and water if transport time exceeds 12 hours, what to do if livestock escape during transport, or how to euthanize an animal injured during transport. Shipping and/or receiving operations need to include these plans in their OSPs.

B. Discussion of Comments Received

1. General Transport, Transport to Slaughter, and Identification of Organic Livestock

(Comment) One comment asked AMS to clarify whether § 205.242(a)(1), which regulates transportation of organic livestock, applies to transport in general or only transportation to slaughter. Other comments expressed concern over the requirement that organic livestock must be transported in designated pens. The comments noted that while identification of organic livestock during transport is essential, requiring designated pens would be burdensome. In practice, identification is generally done through ear tags or other methods, and that requiring designated pens is burdensome.

(Response) Section 205.242(a)(1) applies to transport of organic livestock to buyers, auction, and slaughter facilities. AMS agrees that requiring identification of pens during transport for organic livestock may not be necessary to maintain an audit trail and organic integrity. AMS has amended the language in § 205.242(a)(1) to remove the requirement for designating and identifying organic pens during transport, changing the text to read: Certified organic livestock must be clearly identified as organic, and the identity must be traceable during transport to buyers, auction, and slaughter facilities.

2. Fit for Transport

(Comment) Several comments pointed out that the term 'sick' in § 205.242(a)(2)(ii) should be defined to reduce the possibility that animals are withheld from slaughter due to a minor ailment that does not impact the quality of slaughter products. The comments suggested that the language, ''sick, injured, weak, disabled, blind, and lame'' in this section be replaced with ''non-ambulatory,'' which is consistent with humane slaughter practices and readily verified. Several comments also requested that § 205.242(a)(2) be changed to specify that livestock must be ambulatory to be fit for transport to buyers, auctions, or slaughter facilities.

(Response) AMS agrees that animals should not be withheld from slaughter due to a minor ailment that does not impact the quality of slaughter products and has made the suggested change in § 205.242(a)(2)(ii). In the final rule, the terms ''Sick, injured, weak, disabled, blind, and lame,'' have been replaced with ''non-ambulatory.'' As defined in defined at 9 CFR 309.2(b), non-ambulatory is a condition recognized within the industry and provides a more standardized criterion to evaluate.[19] AMS points out that the definition at 9 CFR 309.2(b) lists examples of conditions that may make livestock non-ambulatory. However, some of these animals may still be able to ambulate. Every situation is case-specific and needs to be evaluated by the certified operator.

3. Transport of Calves

(Comment) Two comments were concerned with the requirement in the proposed rule that calves must not be transported to auction or slaughter facilities until their navel cords are dried and they have the ability to stand and walk on their own. Both comments suggested changes to the rule to allow for more flexibility around when calves could be transported. One comment requested changes to the rule to allow calves with a dry, clean, and disinfected navel cord to be transported, and the other suggested that the rule be revised to set a minimum age for calf transport

[19] 9 CFR 309.2(b): All seriously crippled animals and non-ambulatory disabled livestock shall be identified as U.S. Suspects and disposed of as provided in § 311.1 of this subchapter unless they are required to be classed as condemned under § 309.3. Non-ambulatory disabled livestock are livestock that cannot rise from a recumbent position or that cannot walk, including, but not limited to, those with broken appendages, severed tendons or ligaments, nerve paralysis, fractured vertebral column, or metabolic conditions.

instead of specific navel characteristics. AMS also received comments from organizations that represent hundreds of organic dairy operations. These organizations supported the proposed requirement in § 205.242(a)(2)(i).

(Response) AMS reviewed and considered comments from all organizations that reviewed and analyzed the proposed rule. Based on the widespread support of this subsection, AMS did not feel that a change to the regulation was warranted.

4. Bedding

(Comment) Several comments expressed opposition to the use of bedding for transport of livestock over long distances because of the risk of animal injury due to certain types of bedding or the need to discourage laying down in trailers where crowding may be an issue. One comment asked for clarification on whether rubber mats would be an acceptable form of bedding during transport. Several comments from stakeholders recommended that bedding also be a requirement for poultry crates, stating that poultry should also be kept clean, dry, and comfortable during transport.

(Response) Section 205.242(a)(4) includes the phrase ''as needed,'' which allows for the discretion of the certified operation and their certifier when determining if the use of bedding is appropriate based on risk of injury to the livestock and other welfare concerns. AMS believes that this language describes the requirements with sufficient clarity, while not being overly prescriptive. Certified operations should describe in their organic system plan how they will determine whether or not bedding is necessary during transport. Certifying agents should assess this information when reviewing the certified operators' organic system plan for compliance. In some cases, bedding may not be required because of other animal welfare considerations. Regarding the acceptability of rubber mats during transport, there is nothing in the proposed rule that prohibits the use of rubber mats. The bedding exemption for poultry crates is consistent with the 2011 NOSB recommendation, and AMS is not making changes to require bedding for these livestock. However, a minor change has been made to § 205.242(a)(4) to clarify that bedding is not required for poultry crates.

(Comment) One certifying agent addressed a position AMS made in the preamble to the proposed rule regarding the use of nonorganic bedding in transport, which would render animals nonorganic. While the commenter does not feel that the use of nonorganic bedding should be allowed, they suggested that if it were used unintentionally, the stated sanction is impractical and harsh since bedding in trailers and temporary pens would be in contact with animals for only a short period of time.

(Response) Certifiers are responsible for taking appropriate enforcement actions depending on the nature of the violation. AMS agrees that stating specific sanctions for non-compliant practices is not appropriate. Compliance procedures under the USDA organic regulations are specified under 7 CFR 205.660–668.

5. Transport Exceeding 12 Hours

(Comment) Opposing comments were received on the topic of transport exceeding 12 hours. Several comments indicated that 12 hours was too long for livestock to go without feed and water because animals may have been without feed and water prior to loading for transport. These comments stated that it is cruel not to provide feed and water either continuously or at least every 6 to 8 hours. Conversely, several comments stated that livestock are rarely trucked for longer than 12 hours but that, if they are, they can go without feed and water for longer than 12 hours. One comment stated that if livestock are to be trucked for longer than 12 hours to slaughter or auction, it is likely that the transportation load will be larger and may not be exclusively organic. This comment stated that if the 12-hour rule is to be implemented, it will decrease the availability of transport for organic livestock and increase transport cost, especially for small- to mid-size operations. It was recommended that AMS rely on the federally mandated Twenty Eight Hour Law and remove the requirement for access to feed and water after 12 hours of transport. Another comment stated that the 12-hour requirement may be a hardship to the industry and is not important to birds in transit or waiting for slaughter. The comment stated that birds in strange cages or transport racks are not concerned about food. Several comments requested clarification on whether the 12-hour time period included lairage at the slaughter facility.

(Response) The 12-hour time period was recommended by the NOSB in their 2011 NOSB recommendation on *Animal Handling and Transport to Slaughter.* AMS has determined that the NOSB recommendation, which states that water and organic feed must be available if transport time exceeds 12 hours, is practical and humane. AMS's decision on transport time also aligns with several animal welfare organization positions. With regard to transporting poultry, one animal welfare organization has a 10-hour limit for broilers, and another has no specific time limit for broilers but recommends that animals are taken without delay to their destination. With regard to whether this time frame includes lairage at the slaughter facility, once livestock arrive at the slaughter facility, they must be handled in compliance with § 205.242(b)(1) for mammalian species or § 205.242(c)(1) for avian species.

6. Twenty-Eight Hour Law

(Comment) Several comments received stated that the Twenty-Eight Hour Law provides minimal protection for animals, excludes poultry, and is under-enforced by APHIS. Some comments stated that the law is out of date and inhumane, and they recommended that the proposed rule be amended to limit transport of organically raised animals (including poultry) without food, water, and rest to no more than eight hours. These comments further recommended that the USDA develop a specific inspection program to adequately ensure compliance with these transportation standards. One comment recommended that the Twenty-Eight Hour Law and the requirement regarding noncompliance records also apply to poultry. Even though this regulation currently excludes poultry, this comment noted that the NOP definition of livestock includes poultry and that the consumer expectation of meat carrying the organic label is that all livestock is subject to the same requirements. Another comment requested that the final rule provide a transport limit for poultry since it is not covered under any federal regulation.

Certifying agents and other industry groups commented that § 205.242(a)(5)(i) does not clearly specify the regulation for which the noncompliance records and subsequent corrective actions must be provided. They suggested that this section, specifically § 205.242(a)(5)(ii), directly reference the Federal Twenty-Eight Hour Law (4 U.S.C. 80502) and the regulations at 9 CFR 89.1–89.5. In addition, one comment suggested that a ''Memorandum of Interview (MOI)'' be added for incidents related to the transport of poultry; noncompliance records are currently not issued for incidents involving poultry since the transport and slaughter of birds are not covered by any federal regulation.

(Response) The intention of §§ 205.242(a)(5)(i) and 205.242(a)(5)(ii) in the proposed rule was to clarify the authority of the NOP, certifying agents,

and State organic programs to initiate compliance action if certified operations, or the transport operation that has been contracted by the certified operation to transport organic livestock, are found to have violated the Twenty-Eight Hour Law (49 U.S.C. 80502) and its regulations at 9 CFR 89.1–89.5. However, after consultation with APHIS, AMS has decided to remove reference to the Twenty-Eight Hour Law in the final rule. This is based upon the fact that common carriers are already subject to this law under APHIS. In addition, § 205.242(a)(5) provides that animals may not be transported for more than 12 consecutive hours without feeding and watering. This requirement is more stringent than the Twenty-Eight Hour Law. The USDA Animal and Plant Health Inspection Service (APHIS) can already take enforcement action based on the Twenty-Eight Hour Law and has standards for in-transit feed, water, and rest stations. Animals should be transported to the final destination in a manner that is not detrimental to the welfare of the animals. The role of Accredited Certifying Agents is to review transport times to verify that certified operations are in compliance with the 12 hour requirement and that the transport is not detrimental to the animal's welfare.

Accordingly, after consultation with APHIS, AMS has decided to remove reference to the Twenty-Eight Hour Law in the final rule. The final rule has been amended accordingly.

7. Responsibility and Organic Integrity During Transport and/or at Auction Facilities

(Comment) Several comments expressed concern over whose responsibility it is to maintain organic integrity/compliance with standards during transport. Some comments asserted that non-certified truckers would be responsible for compliance with bedding and feed requirements. One comment suggested adding language to the final rule to clarify that if animals are off-loaded during transport, the location must be certified if the animal is to retain organic status. One comment asked whether it is possible for organic livestock to maintain their organic status when they are kept at non-certified auction facilities while they are marketed and sold. The same comment asked whether the length of time the animal is at the facility or away from the original operation of origin and out of oversight of organic certification inspections impacts the organic status of the animal. One comment indicated that the proposed rule implies that the responsibility for compliance of transportation would fall back solely on the producer and that often it is the purchaser of the livestock (a broker or slaughter company for example) that would be paying for the transportation. This comment states that the entity who pays is the one with the most leverage to set requirements for transportation and obtain records that will verify practices. There is concern that the new requirements cannot be verified adequately without direct observation. The commenter suggested that § 205.242(a)(5)(ii) and 205.242(a)(6) be changed to specify that the operation responsible for documenting that transportation adequately meets the requirements is the certified operation that arranged the transport.

(Response) The criteria for who is responsible for maintaining organic integrity and who has to be certified are provided in NOP 5031: Certification Requirements for Handling Unpackaged Organic Products Guidance and the NOP Instruction 4009: Who Needs to be Certified? Both documents can be found on the AMS Web site: *https://www.ams.usda.gov/*. An operation that handles bulk, unpackaged organic products (such as cattle, milk, or grain) must be certified organic. If animals are off-loaded, the site or facility must be certified organic. Operations that are only transporting livestock, and whose handling practices are supervised and approved by the certified operation and their certifying agent, are not required to be certified. In this case, organic compliance is the responsibility of the certified operator who is responsible for the transportation and is verified by their certifier. AMS has changed §§ 205.242(a)(5)(i) and 205.242(a)(6) to specify that the certified operation responsible for overseeing the transport of organic livestock is responsible for keeping verification records that demonstrate organic compliance during transport.

XI. Slaughter (§ 205.242(b) and (c))

A. Description of Regulations

1. Summary of the Final Rule

Slaughter and the Handling of Livestock in Connection With Slaughter

The requirements with regard to slaughter and handling of livestock in connection with slaughter are governed by separate authority applicable to both certified organic and non-organic livestock products. The final rule reiterates that compliance with these regulations, as determined by FSIS, is required for certified organic livestock operations.

New § 205.242(b) regarding mammalian slaughter clarifies the authority of the NOP, certifying agents, and State organic programs to review records related to humane handling and slaughter issued by the controlling national, federal, or state authority, and records of any required corrective actions if certified operations are found to have violated FSIS regulations governing the humane handling of mammalian livestock in connection with slaughter (note that AMS has separated mammalian from avian slaughter requirements due to the differences in how mammalian and avian livestock are handled and slaughtered). This new section, titled ''Mammalian Slaughter,'' governs mammals defined as ''livestock'' or ''exotic animals'' under the FSIS regulations. Under the FSIS regulations, ''livestock'' are cattle, sheep, swine, goat, horse, mule, or other equine. ''Exotic animals'' include antelope, bison, buffalo, cattalo, deer, elk, reindeer, and water buffalo. These regulations govern the handling and slaughter of the majority of mammalian animals used for food in the United States and apply to all operations that slaughter these animals.

New § 205.242(b)(1) requires certified organic slaughter facilities to be in full compliance with the Humane Methods of Slaughter Act (HMSA) of 1978 (7 U.S.C. 1901 *et seq.*) and its implementing FSIS regulations, as determined by FSIS. The HMSA requires that humane methods be used for handling and slaughtering livestock and defines humane methods of slaughter. In the HMSA, Congress found ''that the use of humane methods in the slaughter of livestock prevents needless suffering; results in safer and better working conditions for persons engaged in the slaughtering industry; brings about improvement of products and economies in slaughtering operations; and produces other benefits for producers, processors, and consumers which tend to expedite an orderly flow of livestock and livestock products in interstate and foreign commerce.'' The HMSA is referenced in the FMIA at 21 U.S.C. 603 and is implemented by FSIS humane handling and slaughter regulations found at 9 CFR part 309 and 9 CFR part 313. The FMIA provides that, for the purposes of preventing inhumane slaughter of livestock, the Secretary of Agriculture will assign inspectors to examine and inspect the methods by which livestock are slaughtered and handled in connection with slaughter in slaughtering

establishments subject to inspection (21 U.S.C. 603(b)).

All establishments that slaughter livestock, which include any certified organic operations that slaughter livestock, must meet the humane handling and slaughter requirements the entire time they hold livestock in connection with slaughter. FSIS provides for continuous inspection in livestock slaughter establishments, and inspection program personnel verify compliance with the humane handling regulations during each shift that animals are slaughtered, or when animals are on site, even during a processing-only shift. The regulations at 9 CFR part 313 govern the maintenance of pens, driveways, and ramps; the handling of livestock, focusing on their movement from pens to slaughter; and the use of different stunning and slaughter methods. Notably, FSIS inspection program personnel verify compliance with the regulations at 9 CFR part 313 through the monitoring of many of the same parameters proposed by the NOSB in 2011, including prod use, slips and falls, stunning effectiveness, and incidents of egregious inhumane handling.[20] The regulations at 9 CFR part 309 govern ante-mortem inspection and ensure that only healthy ambulatory animals are slaughtered and that non-ambulatory are euthanized and disposed of promptly. FSIS has a range of enforcement actions available regarding violations of the humane slaughter requirements for livestock, including noncompliance records, regulatory control actions, and suspensions of inspection.

Further, FSIS encourages livestock slaughter establishments to use a systematic approach to humane handling and slaughter to best ensure that they meet the requirements of the HMSA, FMIA, and implementing regulations.[21] With a systematic approach, establishments focus on treating livestock in such a manner as to minimize excitement, discomfort, and accidental injury the entire time they hold livestock in connection with slaughter. Establishments may develop written animal handling plans and share them with FSIS inspection program personnel.

AMS added a new § 205.242(b)(2) for those certified organic facilities that slaughter exotic animals and voluntarily request FSIS inspection. FSIS also provides, upon request, voluntary inspection of certain exotic animal species on a fee-for-service basis under the authority of the Agricultural Marketing Act of 1946. FSIS regulates the humane handling of the slaughter of exotic animals under the regulations at 9 CFR part 352.10, which require that exotic animals be slaughtered and handled in connection with slaughter in accordance with the requirements for livestock at 9 CFR part 309 and 9 CFR part 313. Violation of these regulations can result in a denial of service by FSIS.

New § 205.242(b)(3) requires that all certified organic slaughter facilities provide any FSIS noncompliance records or corrective action records relating to humane handling and slaughter to certifying agents during inspections or upon request. Not all violations of FSIS regulations result in a suspension of FSIS inspection services. In some cases, FSIS will issue a noncompliance record and the slaughter facility must perform corrective actions to bring the slaughter facility back into compliance. These records must be provided to certifying agents during inspection or upon request to verify that the slaughter facility is in full compliance and has taken all corrective actions. In addition, AMS recognizes that in the U.S. some slaughter facilities are regulated by the State for intra-state meat sales. In foreign countries, foreign governments may be the appropriate regulatory authority for humane slaughter inspections. In all cases, the relevant humane slaughter noncompliance records and corrective action records must be provided to certifying agents during the inspections or upon request.

Slaughter and the Handling of Poultry in Connection With Slaughter

AMS added a new § 205.242(c) regarding avian slaughter facilities. Section 202.242(c)(1) clarifies the authority of the NOP, certifying agents, and State organic programs to review noncompliance records related to the use of good manufacturing practices in connection with slaughter issued by the controlling national, federal, or state authority and records of subsequent corrective action if certified operations are found to have violated the Poultry Products Inspection Act (PPIA) requirements regarding poultry slaughter, violated the FSIS regulations regarding the slaughter of poultry, or failed to use good commercial practices in the slaughter of poultry, as determined by FSIS. Under the PPIA and the FSIS regulations, poultry are defined as chickens, turkeys, ducks, geese, guineas, ratites, and squabs. These species constitute the majority of avian species slaughtered for human food in the U.S. However, the organic standards for avian slaughter apply to all species biologically considered avian or birds. The NOSB did not directly address avian slaughter requirements. However, AMS added avian slaughter requirements for consistency with the new mammalian slaughter requirements and to provide consistent slaughter requirements for certified organic operations.

While the HMSA does not apply to poultry, under the PPIA at 21 U.S.C. 453(g)(5) a poultry product is considered adulterated if it is in whole, or in part, the product of any poultry which has died by other means than slaughter. FSIS regulations, in turn, require that poultry be slaughtered in accordance with good commercial practices in a manner that will result in thorough bleeding of the poultry carcass and will ensure that breathing has stopped before scalding (9 CFR 381.65 (b)). Compliance with FSIS Directives 6100.3 and 6910.1, as determined by FSIS is required under the final rule.

In a 2005 **Federal Register** Notice, FSIS reminded all poultry slaughter establishments that live poultry:

> . . . must be handled in a manner that is consistent with good commercial practices, which means they should be treated humanely. Although there is no specific federal humane handling and slaughter statute for poultry, under the PPIA, poultry products are more likely to be adulterated if, among other circumstances, they are produced from birds that have not been treated humanely, because such birds are more likely to be bruised or to die other than by slaughter.[22]

Also in this Notice, FSIS suggested that poultry slaughter establishments consider a systematic approach to handling poultry in connection with slaughter. FSIS defined a systematic approach as one in which establishments focus on treating poultry in such a manner as to minimize excitement, discomfort, and accidental injury the entire time that live poultry is held in connection with slaughter. Although the adoption of such an approach is voluntary, it would likely better ensure that poultry carcasses are unadulterated.

FSIS inspection program personnel verify that poultry slaughter is conducted in accordance with good commercial practices in the pre-scald area of slaughter establishments, where they observe whether establishment employees are mistreating birds or

[20] FSIS Directive 6900.2, Revision 2, *Humane Handling and the Slaughter of Livestock,* August 15, 2011.

[21] *Humane Handling and Slaughter Requirements and the Merits of a Systematic Approach to Meet Such Requirements,* FSIS, 69 FR 54625, September 9, 2004.

[22] *Treatment of Live Poultry before Slaughter,* FSIS, 70 FR 56624, September 28, 2005.

handling them in a way that will cause death or injury, prevent thorough bleeding, or result in excessive bruising. Examples of noncompliant mistreatment could include breaking the legs of birds to hold the birds in the shackle, birds suffering or dying from heat exhaustion, and breathing birds entering the scalder.[23] Also, in 2015, FSIS issued specific instructions to inspection program personnel for recording noncompliance with the requirement for the use of good commercial practices in poultry slaughter.[24]

New § 205.242(c)(2) requires that all certified organic slaughter facilities provide, during the annual organic inspection, any FSIS noncompliance records and corrective action records related to the use of good manufacturing practices in the handling and slaughter of poultry in order to determine that slaughter facilities have addressed any outstanding FSIS noncompliances and are in good standing with FSIS. Not all violations of FSIS regulations result in a suspension of inspection services. In some cases, FSIS will issue a noncompliance record and the slaughter facility must perform corrective actions to bring the slaughter facility back into compliance. These records must be provided to the certifying agent at inspection or upon request to verify that the slaughter facility is operating in compliance with FSIS regulations and is addressing/has addressed all corrective actions. In addition, AMS recognizes that some poultry slaughter facilities in the U.S. are regulated by the State for intra-state poultry sales. In foreign countries, foreign governments may be the appropriate regulatory authority for poultry slaughter inspections. In all cases, the relevant noncompliance records and corrective action records must be provided to the certifying agent during inspections or upon request.

Unlike the requirements for livestock slaughter inspection, exemptions from poultry slaughter inspection exist for some poultry that is going to be sold to the public. AMS added handling and slaughter standards for such poultry that is either exempt from or not covered by the inspection requirement of the PPIA. Section 205.242(c)(3) would prohibit hanging, carrying, or shackling any lame birds by their legs. Birds with broken legs or injured feet may suffer needlessly if carried or hung by their legs. Such birds must either be euthanized or made insensible before being shackled.

New § 205.242(c)(3)(i) through (iii) require poultry slaughter operations that are either exempt or not covered by the requirements of the PPIA to meet the standards that non-exempt slaughter operations must meet. AMS included a requirement that no lame birds be hung on shackles by their feet. AMS also included a requirement that all birds that were hung or shackled on a chain or automated slaughter system be stunned prior to exsanguination. This requirement does not apply to small-scale producers who do not shackle the birds or use an automated system but who instead place the birds in killing cones before exsanguinating them without stunning. This requirement would not apply to ritual slaughter establishments (*e.g.,* Kosher or Halal slaughter facilities), who are required to meet all the humane handling regulatory requirements except stunning prior to shackling, hoisting, throwing, cutting, or casting. New § 205.242(c)(3)(iii) requires that all birds be irreversibly insensible prior to being placed in the scalding tank.

B. Discussion of Comments Received

1. Special Animal Welfare Requirements for Certified Organic Slaughter Facilities

(Comment) Several comments stated that the organic standards should require that only organic animals are handled at a certified organic slaughter facility and that the organic standards should go above and beyond the FSIS requirements for humane slaughter. For example, comments recommended that there should be more severe sanctions if noncompliances related to animal welfare are repeated, that the NOP should train slaughter facility staff on the USDA organic regulations, that the organic standards should be as explicit as NOSB recommendations on slaughter, and that the standards include a recommended hierarchy identifying the most humane methods of slaughter for each species. Comments also requested that the organic requirements include more detailed language regarding humane and prohibited forms of euthanasia of non-ambulatory animals upon arrival at the slaughter facility. Several comments recommended adding to 205.242(b)(1): 9 CFR part 309 regarding ante-mortem inspection to ensure that only healthy ambulatory animals are slaughtered and that non-ambulatory animals are euthanized and disposed of promptly. This regulation has recently been updated to include veal calves.

(Response) The USDA organic regulations provide for enforcement options that are implemented by the certifying agent when there are repeated violations of humane handling and slaughter regulations. AMS is not ranking allowed methods of slaughter for preference based on humane considerations as that would be challenging to enforce. AMS agrees with the suggestion to add reference to 9 CFR part 309 in the final rule in §§ 205.242(b)(1) and 205.242(b)(2), which cover the requirements for the humane and prompt euthanizing and disposing of non-ambulatory animals at the slaughter facility. Additionally, AMS has determined that the FSIS regulations are sufficient for protecting animal welfare because they include many of the provisions recommended by the NOSB for livestock slaughter. Adding requirements beyond the FSIS regulations may be overly prescriptive for organic production. AMS will provide trainings on this regulation, which will be available to all interested parties, including certifying agents, organic producers, and handlers who would like further clarification on these requirements.

2. Inspectors Not Trained in FSIS Requirements

(Comment) Several comments expressed concern over the requirement for organic inspectors to verify the mitigation of noncompliances found during FSIS inspections. The comments stated that inspectors do not have the expertise to determine if corrective actions to FSIS noncompliances are sufficient. Comments stated that verifying FSIS regulatory requirements is beyond the scope of organic certification and that this would place an unnecessary burden on inspectors and certifying agents. Other comments stated that FSIS personnel are specifically trained in identifying and responding to the PPIA and good commercial practice regulations, whereas certifying agents are not. They expressed concern that the new requirements for transporting livestock and poultry to sale or slaughter are redundant and unnecessary since FSIS already has regulations in place for slaughter. They assert that the duty of identifying and responding to noncompliance events remains exclusively under the oversight of trained FSIS personnel in order to protect the welfare of poultry during slaughter. In addition, several certifying agents were concerned that cross-references to external statutes may render the organic standards obsolete and in need of future revision should

[23] FSIS Directive 6100.3, Revision 1, *Ante-Mortem and Post-Mortem Poultry Inspection,* April 30, 2009.

[24] FSIS Notice 07–15, *Instructions for Writing Poultry Good Commercial Practices Noncompliance Records and Memorandum of Interview Letters for Poultry Mistreatment,* January 21, 2015.

the external statutes significantly change. Comments cited the USDA organic standards cross-referencing of the EPA's List 4 of Inerts as an example. Comments recommended that AMS determine the specific elements of the cited laws they wish to incorporate into the standards and include generic language that reflect those requirements. Several comments recommended that there be trained inspectors dedicated exclusively to observing compliance (ideally daily or at least on a weekly rotating basis) with animal welfare conditions on site at all organic slaughter facilities, with particular attention at the point of slaughter.

(Response) Through this final rule, AMS has established requirements that govern mammalian and avian species that are slaughtered by organic operations. Because these requirements are consistent with existing federal regulations for livestock slaughter, AMS expects that the organic producers and handlers will comply with these requirements. FSIS standards apply to organic and non-organic livestock, and FSIS is already carrying out inspections to this regulation. The role of the organic certifier/inspector is to verify whether FSIS has issued noncompliance records and if so, to verify that the certified operation has resolved or is working to revolve any FSIS noncompliances and is in good standing with FSIS. If not, the organic certifier is required to take appropriate enforcement action of organic rules under the USDA organic regulations. For example, if FSIS noncompliances have not been resolved, the certifying agent may issue a noncompliance to the certified facility to request verification that FSIS noncompliances have been resolved with FSIS as a condition for ongoing organic certification. Otherwise, this regulation would not change the current scope of the organic inspection of certified slaughter facilities. Organic inspectors are not required to know how to inspect slaughter facilities according to FSIS regulatory requirements and are not required to determine if corrective actions mitigate FSIS noncompliances.

However, as with any inspection, inspectors need to be highly qualified in the type of operation they are inspecting. AMS conducts annual trainings for certifying agents and will ensure that FSIS issues are also covered during those trainings. AMS will provide guidance to certifiers (agents) and inspectors on issues that may need further clarification once this rule is in effect. Regarding cross-referencing other federal regulations, AMS has determined that this does not pose a significant risk as stated in the comments. The FSIS regulation may be amended over time, but it is less likely to become obsolete. Furthermore, AMS will ensure updates and trainings are provided when FSIS regulations or procedures change.

3. Vocalization Thresholds

(Comment) One comment suggested that specific vocalization thresholds be included in the regulation, as provided in the 2011 NOSB recommendation and the Certified Humane Slaughter Standards. Vocalizations of livestock in slaughter facilities can be associated with animal distress and welfare problems in the plant. The NOSB recommended that: (1) No more than 3% of cattle vocalize as they move through the restrainer, stunning box, and stunning area; (2) no more than 5% of hogs squeal in the restrainer due to human provocation; (3) no more than 5% of livestock vocalize when a head holder is used during stunning or slaughter; and (4) no more than 1% of hogs vocalize due to hot wanding. Vocalization scoring, as suggested by the NOSB recommendation, could be used as an objective method for detecting welfare problems during slaughter since cattle and hogs will vocalize during handling if stressed, injured, or scared but they will not vocalize if calm. The percentages provided in the NOSB recommendation would indicate well-managed slaughter plants; skilled, careful handlers; adequate equipment design and condition, and calm animals.

(Response) Facilities that meet the FSIS humane handling and slaughter requirements will ensure that animal distress during handling/slaughter is minimized, achieving the same impact as using vocalization threshold scoring. FSIS inspection program personnel verify compliance with the regulations at 9 CFR part 313 through the monitoring of many of the parameters recommended by the NOSB in 2011, including prod use, slips and falls, stunning effectiveness, and incidents of egregious inhumane handling. AMS did not feel that a change to the rule to include vocalization thresholds was warranted.

4. International Animal Welfare Requirements

(Comment) Several comments asked how an established final rule would impact existing organic trade agreements, such as equivalency agreements and recognition agreements. For example, some comments highlighted specific provisions in the proposed rule that differ from established regulations in some foreign countries. Some of the comments questioned whether existing equivalency agreements would require renegotiation when the final rule becomes effective.

(Response) When the USDA organic regulations are amended, the USDA follows a set of steps with respect to international trade agreements. Under equivalency arrangements, the USDA notifies the foreign country of any amended USDA organic regulation that may affect the terms of the existing equivalency determination. The foreign country reviews the information and may initiate discussion to determine whether renegotiation is needed. With recognition agreements, the certification bodies in the foreign country are accredited by the recognized foreign government authority to certify operations under the USDA organic regulations. As a result, the USDA notifies the foreign government of the amended USDA organic regulation, and the foreign government authority informs its accredited certification bodies of the amended regulation.

(Comment) Comments were received regarding meat and poultry imports and how AMS will regulate livestock slaughter by certified organic operations in foreign countries. One comment provided country-specific recommendations regarding cattle transport and slaughter requirements. This comment recommended a modification of the new rules to stipulate that while cattle are in other countries that must adhere to state and/or federal animal welfare standards, these countries must abide by the standards and guidelines prescribed in their domestic animal welfare standards for the transport and slaughter of livestock. Additionally, one comment indicated that U.S. certifiers are currently unequipped to verify compliance with these other rules/laws for producers outside of the U.S.

(Response) Many facilities in other countries are already producing meat and poultry for the U.S. market that complies with FSIS export program requirements, regardless of whether the facility is certified organic. Certifying agents operating in countries outside of the U.S. are accredited by the USDA and will need to incorporate this final rule into their NOP certification programs. Foreign certifying agents will need to verify that livestock are being transported and handled according to the requirements of the final rule as well as FSIS equivalent programs. Noncompliance records related to these equivalent programs will be reviewed during annual organic certification

assessments and verified through annual organic inspections or upon request by the certifier. When noncompliances are observed by the appropriate authority under the FSIS equivalency program, the certifying agent will implement the necessary enforcement actions under the organic program, as applicable.

5. Humane Methods of Slaughter Act

(Comments) Some comments received expressed concern that the proposed rule § 205.242(b)(1) contains no reference to the Humane Methods of Slaughter Act (HMSA). Instead, it refers to the Federal Meat Inspection Act (which itself references the HMSA) and parenthetically to the FSIS regulations at 9 CFR part 313. Comments recommended that this omission be corrected to include a direct reference to the HMSA by name and citation and to clarify that the HMSA provides minimum standards. The same comments recommended that provisions from the National Organic Standards Board (NOSB) recommendations on transport and slaughter be added.

(Response) The final rule requires certified organic slaughter facilities to be in full compliance with the Humane Methods of Slaughter Act (HMSA) of 1978 (7 U.S.C. 1901 *et seq.*) and its implementing FSIS regulations, as determined by FSIS. The HMSA requires that humane methods be used for handling and slaughtering livestock and defines humane methods of slaughter. The HMSA is referenced in the FMIA at 21 U.S.C. 603 and is implemented by FSIS humane handling and slaughter regulations found at 9 CFR part 313. The FMIA provides that, for the purposes of preventing inhumane slaughter of livestock, FSIS assigns inspectors to examine and inspect the methods by which livestock are slaughtered and handled in connection with slaughter in slaughtering establishments subject to inspection (21 U.S.C. 603(b)). The final rule references the FSIS regulation 9 CFR part 313 because the regulation clearly conveys how operators must comply with the HMSA Act.

6. Avian Slaughter

(Comment) Several comments expressed concern that the proposed rule addresses avian slaughter, which is not covered by the Humane Methods of Slaughter Act (HMSA) and therefore is not currently governed by clearly defined humane standards. Other comments received state that the requirements of § 205.242(c)(3) for organic poultry slaughter operations exempt from or not covered by the requirements of the PPIA—which provide that no lame birds may be shackled, hung, or carried by their legs; that birds must be stunned prior to exsanguination; and that all birds must be irreversibly insensible prior to scalding—should apply to *all* organic poultry slaughter, and that it is not clear from the language of the proposed rule that these same requirements apply to slaughter plants exempt from or not covered by the PPIA. Comments also stated that FSIS has not codified the contents of the ''good manufacturing practices'' Directives 6100.3 and 6910.1. These comments argued that the avian slaughter section, as proposed, creates a discrepancy in which slaughter plants covered by the PPIA would implement less stringent requirements than those proposed for exempt/non-covered plants under § 205.242(c)(3). Several comments provided additional conditions for humane avian slaughter that should be incorporated into the final rule.

(Response) Section 202.242(c)(1) clarifies the authority of the NOP, certifying agents, and State organic programs to initiate compliance action if certified operations are found to have violated the Poultry Products Inspection Act (PPIA) requirements regarding poultry slaughter, as well as the FSIS regulations regarding the slaughter of poultry and the use of good commercial practices in the slaughter of poultry. The NOSB did not directly address avian slaughter requirements. However, AMS is implementing avian slaughter requirements for consistency with the mammalian slaughter requirements and to better ensure the welfare of all animals slaughtered by certified operations. While the HMSA does not apply to poultry, under the PPIA at 21 U.S.C. 453(g)(5), a poultry product is considered adulterated if it is in whole, or in part, the product of any poultry which has died otherwise than by slaughter. FSIS regulations require that poultry be slaughtered in accordance with good commercial practices, in a manner that will result in thorough bleeding of the poultry carcass and that will ensure that breathing has stopped before scalding (9 CFR 381.65 (b)). In a 2005 **Federal Register** Notice, FSIS reminded all poultry slaughter establishments that live poultry: ''. . . must be handled in a manner that is consistent with good commercial practices, which means they should be treated humanely.'' Also in this Notice, FSIS suggested that poultry slaughter establishments consider a systematic approach to handling poultry in connection with slaughter. FSIS defined a systematic approach as one in which establishments focus on treating poultry in such a manner as to minimize excitement, discomfort, and accidental injury the entire time that live poultry is held in connection with slaughter. FSIS inspection program personnel verify that poultry slaughter is conducted in accordance with good commercial practices in the pre-scald area of slaughter establishments, where they observe whether employees are mistreating birds or handling them in a way that will cause death or injury, prevent thorough bleeding, or result in excessive bruising. AMS agrees with the suggestion to include reference to the FSIS Directives 6100.3 and 6910.1 in 205.242(c)(1) and has made this change in the final rule.

(Comment) Some comments expressed concern that learning and enforcing FSIS rules could present an undue/unreasonable burden for certifiers and producers, especially for on-farm poultry processing. They request information on how a processor can prove they are in compliance with FSIS requirements and on how an operation slaughtering poultry on-farm under exemption can prove compliance with FSIS requirements.

(Response) A certified organic operation must meet the requirements of the USDA organic regulation. Operations must be compliant with all regulations that impact products they produce. Certifying agents are not assessing compliance with other regulations but only verifying compliance through review and inspection of a certified operation's noncompliance records issued by the regulatory authority. This final rule recognizes that some operations are exempt from poultry slaughter inspection and proposed handling and slaughter standards for such poultry that is either exempt from or not covered by the inspection requirement of the PPIA. Section 205.242(c)(3) prohibits hanging, carrying, or shackling any lame birds by their legs. Birds with broken legs or injured feet may suffer needlessly if carried or hung by their legs. Such birds must either be euthanized or made insensible before being shackled.

In addition, the final rule includes §§ 205.242(c)(3)(i) through (iii) to require poultry slaughter operations that are either exempt or not covered by the requirements of the PPIA to meet animal welfare standards that non-exempt slaughter operations must meet. This final rule requires that no lame birds be hung on shackles by their feet and that all birds that were hung or shackled on a chain or automated slaughter system

be stunned prior to exsanguination. This requirement would not apply to small-scale producers who do not shackle the birds or use an automated system but who instead place the birds in killing cones before exsanguinating them without stunning. This requirement would also not apply to ritual slaughter establishments (*e.g.,* Kosher or Halal slaughter facilities), who are required to meet all the humane handling regulatory requirements except stunning prior to shackling, hoisting, throwing, cutting, or casting. Additionally, § 205.242(c)(3)(iii) requires that all birds be irreversibly insensible prior to being placed in the scalding tank.

7. Religious Slaughter and Avian Slaughter by Exempt Operations

(Comment) Several comments expressed concern that the rule may require that Kosher or Halal slaughter facilities use a stunning step prior to exsanguination. These comments indicated that the rule is not clear on whether the stunning requirement is mandatory for operations that are exempt from or not covered by the requirements of the Poultry Products Inspection Act. While this requirement is directed at processors operating under state inspection who do not fall under the USDA FSIS inspection requirements, designated religious slaughter facilities are exempt from certain aspects of the Poultry Products Inspection Act, necessitating additional clarity. One comment recommended that slaughter not be limited to stunning prior to exsanguination and include other methods, such as the hand slaughter of birds in killing cones by way of exsanguination. The comment suggested that this should apply to both small/exempt and large/non-exempt producers.

(Response) Sections 205.242(c)(3)(i) through (iii) of the final rule requires that poultry slaughter operations that are either exempt or not covered by the requirements of the PPIA meet animal welfare standards that non-exempt slaughter operations must meet. Except as described below, the final rule requires that all birds that are hung or shackled on a chain or automated slaughter system be stunned prior to exsanguination. This requirement would not apply to handling operations, including small-scale exempt producers, that do not shackle the birds or use an automated system but that instead place the birds in killing cones, or use other methods, before exsanguinating the birds without stunning. This requirement would also not apply to ritual slaughter establishments (*e.g.,* Kosher or Halal slaughter facilities), who are required to meet all the humane handling regulatory requirements except stunning prior to shackling, hoisting, throwing, cutting, or casting. Non-exempt operations must meet the requirements of PPIA.

8. Records

(Comment) Several comments were received that suggested amending the term ''noncompliant records'' to ''noncompliance records'' in all relevant sections of 202.242 as this is the typical title of enforcement documents issued by the USDA Food Safety and Inspection Service (FSIS), as well as state departments of agriculture.

(Response) AMS agrees that reference to ''noncompliant records'' should be ''noncompliance records'' and has made the necessary changes to all relevant sections of the final rule.

9. Scope of Inspection

(Comment) One comment stated that, while the proposed rule proposes that sick, injured, weak, disabled, blind, and lame animals must not be transported for sale or slaughter, an organic producer can withdraw livestock from certification. Once this certification is withdrawn, certification agencies have limited authority to document a noncompliance. The comment requested clarification regarding the enforcement of this scenario.

(Response) Only animals certified organic and identified/traceable as such during transport are subject to the requirements of this rule.

10. OIE Terrestrial Animal Health Code

(Comment) One comment proposed that the organic animal welfare rule should be more consistent with the OIE Terrestrial Animal Health Code as it applies to transport and slaughter of organic livestock.

(Response) The NOSB reviewed many regulatory references when developing its organic transport and slaughter recommendations. AMS considered OIE Terrestrial Animal Health Code but is not making changes based on the OIE Terrestrial Animal Health Code at this time. However, AMS may provide these standards to the NOSB for their consideration in the future.

XII. Executive Orders 12866 and 13563—Executive Summary

Executive Orders 12866 and 13563 direct agencies to assess all costs and benefits of available regulatory alternatives, and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, reducing costs, harmonizing rules, and promoting flexibility. This rulemaking has been designated as an ''economically significant regulatory action'' under section 3(f) of Executive Order 12866, and, therefore, has been reviewed by the Office of Management and Budget (OMB).

AMS is conducting this rulemaking to maintain consumer confidence in the USDA organic seal. This action is necessary to augment the USDA organic livestock production regulations with clear provisions to fulfill one purpose of the Organic Foods Production Act (OFPA) (7 U.S.C. 6501–6522): To assure consumers that organically-produced products meet a consistent and uniform standard. OFPA mandates that detailed livestock regulations be developed through notice and comment rulemaking and intends for the involvement of the National Organic Standards Board (NOSB) in that process (7 U.S.C. 6508(g)). In 2010, AMS published a final rule (75 FR 7154, February 17, 2010) clarifying the pasture and grazing requirements for organic ruminant livestock, which partially addressed OFPA's objective for more detailed livestock standards. This rule extends that level of detail and clarity to all organic livestock and poultry, and would ensure that organic standards cover their entire lifecycle, consistent with recommendations provided by USDA's Office of Inspector General and nine separate recommendations from the NOSB.

This rule adds requirements for the production, transport, and slaughter of organic livestock and poultry. The provisions for outdoor access and space for organic poultry production are the focal areas of this rule. Currently, organic poultry are required to have outdoor access, but this varies widely in practice. Some organic poultry operations provide large, open-air outdoor areas, while other operations provide minimal outdoor space or use screened and covered enclosures commonly called ''porches'' to meet outdoor access requirements. This variability perpetuates an uneven playing field among producers and sows consumer confusion about the meaning of the USDA organic label. This final rule will resolve the current ambiguity about outdoor access for poultry and address the wide disparities in production practices among the organic poultry sector. Greater clarity about the significance of the USDA organic seal in the marketplace will help to maintain

consumer confidence in the organic label, which drives the $43 billion in sales of organic products, and support a fair, viable market for producers who chose to pursue organic certification.

The economic impact analysis describes the potential impacts for organic egg and broiler producers, because these types of operations will face additional production costs as a result of this rule, and the potential benefits of greater clarity in the requirements for organic poultry. The following provisions will require producers to incur costs to provide:

- Additional indoor space for broilers;
- Additional outdoor space for layers;

To project costs, AMS assessed current, or baseline, conditions and considered how producers might respond to the above requirements. Based on public comment, NOSB deliberations and surveys of organic poultry producers, we determined that the indoor stocking density requirements for broilers and the outdoor access/stocking density requirements for layers drive the costs of this rule. For organic layers, the key factor affecting compliance is the availability of land to accommodate all birds at the required stocking density. We considered two potential scenarios of how producers would respond: (1) All affected organic egg producers make operational changes to comply with the rule and maintain current levels of production; or, (2), 50 percent of organic egg operations move to the cage-free market because they choose to leave the organic market. Based on public comment, AMS assumed that organic broiler producers would build new facilities to maintain their current production level and remain in the organic market. In this analysis, AMS accounts for costs that accrue to legacy producers and new entrants; the full compliance costs recur annually and are included in the total. Legacy producers are producers who decided to go into the organic business with no knowledge of the costs that would be imposed by this rulemaking. Costs do not accrue until this rule is fully implemented, *i.e.,* three years after publication for broiler producers and five years after publication for layer producers.

In summary, AMS estimates that production costs will range between $8.2 million to $31 million annually. This range spans three producer response scenarios, which are summarized in the table below.

- We estimate that the annualized costs for organic broiler and egg producers are $28.7 to $31 million (over 15 years), if all certified organic egg production in 2022 complies with this rule and all certified organic broiler production in 2020 complies with this rule. The timeframe corresponds to the end of the implementation period for the outdoor access requirements for layers and indoor space requirements for broilers. In this scenario, the potential reduced feed efficiency and increased mortality from greater outdoor access are the key variables that impact costs for layers.
- We estimate the annualized costs for organic broiler and organic egg production is $11.7 to $12.0 million if 50 percent of organic egg production in 2022 transitions to the cage-free egg market. Under the latter scenario, the shift would also result in foregone profits of nearly $80 to $86 million (annualized) for production that moves from organic to cage-free egg production. (Because foregone revenues are not a direct cost of compliance with the rule, they are totaled separately from estimated compliance costs). In this scenario, the difference in price between organic and cage-free eggs accounts for the transfer impact.
- We estimate the annualized costs for organic broiler and organic egg production is $8.2 million if 50 percent of organic egg production in 2022 transitions to the cage-free egg market and producers who cannot comply with the rule do not enter organic production during the implementation timeframe.
- In the above scenarios, we estimate the annualized costs for organic broiler production account for $3.5 million to $4.0 million of the above totals. This reflects costs to build additional housing for more space per bird to meet the indoor stocking density requirement.

This rule will have broad, important benefits for the organic sector as a whole which are difficult to quantify. Clear and consistent standards, which more closely align to consumer expectations, are essential to sustaining demand and supporting the growth of the $43 billion U.S. organic market. Clear parameters for production practices will ensure fair competition among producers by facilitating equitable certification and enforcement decisions.

To monetize the benefits of this rule, AMS used research that has measured consumers' willingness to pay for outdoor access between $0.21 and $0.49 per dozen eggs. Based on this, AMS estimates that the annualized benefits would range between $4.1 million to $49.5 million annually. The range in benefits accounts for several producer response scenarios, which correspond to those described above for the cost estimates.

In the Regulatory Flexibility Analysis, we report that large poultry operations would have significantly higher compliance costs than small operations on average. Larger organic layer operations, in particular, will have demand greater land areas for outdoor access.

AMS estimates that business revenues for small organic layer operations are $736 million, or about $1.03 million per firm. For small egg producers, business revenues would need to be less than $867,000 to $967,000 per firm for the rule to cost more than 3% of revenue. The estimated business revenue is calculated from the projected organic egg production from small producers using AMS Market News data on the U.S. organic layer population, estimated lay rate of 308 eggs/hen/year and the wholesale price for organic eggs $2.83/dozen (AMS Market News).

A summary of the estimated costs and benefits associated with this rule is provided in Table A.

TABLE A—SUMMARY OF BENEFITS, COSTS, AND DISTRIBUTIONAL EFFECTS OF FINAL RULE

Assumed conditions	Affected population	Costs, millions [a]	Benefits, millions	Transfers, millions
All producers remain in organic market; Organic layer and broiler populations continue historical growth rates after rule.	Organic layer and organic broiler production at full implementation of rule, *i.e.,* 2022 for layers; 2020 for broilers.	$28.7–$31.0	$16.3–$49.5	N/A
50% of organic layer production in year 6 (2022), moves to the cage-free market. Organic layer and broiler populations continue historical growth rates after rule.	Organic layer and organic broiler production at full implementation of rule, *i.e.,* 2022 for layers; 2020 for broilers.	$11.7–$12.0	$4.5–$13.8	$79.5–$86.3

TABLE A—SUMMARY OF BENEFITS, COSTS, AND DISTRIBUTIONAL EFFECTS OF FINAL RULE—Continued

Assumed conditions	Affected population	Costs, millions [a]	Benefits, millions	Transfers, millions
50% of current organic layer production moves to the cage-free market in year 6 (2022). There are no new entrants after publication of this rule that cannot comply.	Current organic layer production; organic broiler production at full implementation of rule in 2020.	$8.2	$4.1–$12.4	$45.6–$49.5
Other impacts: Estimated paperwork burden: $3.9 million.				

[a] All values in the costs, benefits and transfers columns of this table are annualized and discounted at 3% and 7% rates.

XIII. Retrospective Analysis

Within 3–5 years of full implementation, the Administrator shall conduct and make publicly available a retrospective analysis of the impacts of this rulemaking. This analysis will include a retrospective evaluation of the benefits, costs and transfers of the rule, along with a comparison of these impacts to the prospective estimates contained in this final regulatory impact analysis. The retrospective analysis should include consideration of factors such as: The impacts on exit and entry of affected entities; market shares of affected entities, as well as market competition and concentration; the impacts on the number of producers participating in the organic program; impacts on organic egg production volume, impacts on secondary (*e.g.,* feed/grain) markets; impacts on supply and price of eggs; and impacts on consumer understanding. An opportunity for public comment on this analysis will be provided.

XIV. Executive Order 12988

Executive Order 12988 instructs each executive agency to adhere to certain requirements in the development of new and revised regulations in order to avoid unduly burdening the court system. This final rule cannot be applied retroactively.

States and local jurisdictions are preempted under the OFPA from creating programs of accreditation for private persons or State officials who want to become certifying agents of organic farms or handling operations. A governing State official would have to apply to USDA to be accredited as a certifying agent, as described in section 6514(b) of the OFPA. States are also preempted under sections 6503 and 6507 of the OFPA from creating certification programs to certify organic farms or handling operations unless the State programs have been submitted to, and approved by, the Secretary as meeting the requirements of the OFPA.

Pursuant to section 6507(b)(2) of the OFPA, a State organic certification program may contain additional requirements for the production and handling of organically produced agricultural products that are produced in the State and for the certification of organic farm and handling operations located within the State under certain circumstances. Such additional requirements must: (a) Further the purposes of the OFPA, (b) not be inconsistent with the OFPA, (c) not be discriminatory toward agricultural commodities organically produced in other States, and (d) not be effective until approved by the Secretary.

Pursuant to section 6519(f) of the OFPA, this final rule would not alter the authority of the Secretary under the Federal Meat Inspection Act (21 U.S.C. 601–624), the Poultry Products Inspection Act (21 U.S.C. 451–471), or the Egg Products Inspection Act (21 U.S.C. 1031–1056), concerning meat, poultry, and egg products, nor any of the authorities of the Secretary of Health and Human Services under the Federal Food, Drug and Cosmetic Act (21 U.S.C. 301–399), nor the authority of the Administrator of the EPA under the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136–136(y)).

Section 6520 of the OFPA provides for the Secretary to establish an expedited administrative appeals procedure under which persons may appeal an action of the Secretary, the applicable governing State official, or a certifying agent under this title that adversely affects such person or is inconsistent with the organic certification program established under this title. The OFPA also provides that the U.S. District Court for the district in which a person is located has jurisdiction to review the Secretary's decision.

XV. Executive Order 13175

This final rule has been reviewed in accordance with the requirements of Executive Order 13175, ''Consultation and Coordination with Indian Tribal Governments.'' Executive Order 13175 requires Federal agencies to consult and coordinate with tribes on a government-to-government basis on policies that have tribal implications, including regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

AMS assessed the impact of this rule on Indian tribes and determined that this rule does not, to our knowledge, have tribal implications that require tribal consultation under E.O. 13175. If a Tribe requests consultation, AMS will work with the Office of Tribal Relations to ensure meaningful consultation is provided where changes, additions and modifications identified herein are not expressly mandated by Congress.

XVI. Paperwork Reduction Act

A. Summary

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520) (PRA), AMS is requesting OMB approval for a new information collection totaling 131,683 hours for the reporting and recordkeeping requirements contained in this final rule. OMB previously approved information collection requirements associated with the NOP and assigned OMB control number 0581–0191. AMS intends to merge this new information collection, upon OMB approval, into the approved 0581–0191 collection. Below, AMS has described and estimated the annual burden, *i.e.,* the amount of time and cost of labor, for entities to prepare and maintain information to participate in this voluntary labeling program. The OFPA, as amended, provides authority for this action.

Title: National Organic Program: Organic Livestock and Poultry Practices.

OMB Control Number: 0581–0293.

Expiration Date of Approval: 3 years from OMB date of approval.

Type of Request: New collection.

Abstract: Information collection and recordkeeping is necessary to implement reporting and recordkeeping necessitated by amendments to

§§ 205.238, 205.239, 205.241, 205.242 and 205.290 for additional animal welfare standards for organic livestock production under the USDA organic regulations. OFPA authorizes the further development of livestock production standards (7 U.S.C. 6513(c)). This action is necessary to address multiple recommendations provided to USDA by the NOSB to add specificity about animal welfare practices with the purpose of ensuring consumers that conditions and practices for livestock products labeled as organic encourage and accommodate natural behaviors and utilize preventive health care slaughter practices.

All certified organic operations must develop and maintain an organic system plan for certification (§ 205.201). The OSP must include a description of practices and procedures to be performed and maintained, including the frequency with which they will be performed; under this final rule, organic livestock operations are subject to additional reporting requirements. The amendments to §§ 205.238, 205.239, 205.241, 205.242, and 205.290 require livestock operations to provide specific documentation as part of an organic system plan to include conditions on livestock living conditions to permit natural behavior, including minimum space requirements, outdoor access, and utilization of preventive health care practices (*e.g.* physical alterations, euthanasia).

The PRA also requires AMS to measure the recordkeeping burden. Under the USDA organic regulations each producer is required to maintain and make available upon request, for 5 years, such records as are necessary to verify compliance (§ 205.103). Certifying agents are required to maintain records for 5 to 10 years, depending on the type of record (§ 205.510(b)), and make these records available for inspection upon request (§ 205.501(a)(9)). The new information that livestock operations must provide for certification will assist certifying agents and inspectors in the efficient and comprehensive evaluation of these operations and will impose an additional recordkeeping burden for livestock operations. Certifying agents currently involved in livestock certification are required to observe the same recordkeeping requirements to maintain accreditation, therefore AMS expects that this final rule does not significantly increase the recordkeeping burden on certifying agents.

Reporting and recordkeeping are essential to the integrity of the organic certification system. A clear paper trail is a critical tool for verifying that practices meet the mandate of OFPA and the USDA organic regulations. The information collected supports the AMS mission, program objectives, and management needs by enabling us to assess the efficiency and effectiveness of the NOP. The information also affects decisions because it is the basis for evaluating compliance with OFPA and USDA organic regulations, administering the NOP, establishing the cost of the program, and facilitating management decisions and planning. It also supports administrative and regulatory actions to address noncompliance with OFPA and USDA organic regulations.

This information collection is only used by the certifying agent and authorized representatives of USDA, including AMS and NOP staff. Certifying agents, including any affiliated organic inspectors, and USDA are the primary users of the information.

Respondents

AMS identified three types of entities (respondents) that will need to submit and maintain information in order to participate in organic livestock certification. For each type of respondent, we describe the general paperwork submission and recordkeeping activities and estimate: (i) the number of respondents; (ii) the hours they spend, annually, completing the paperwork requirements of this labeling program; and, (iii) the costs of those activities.

1. *Certifying agents.* Certifying agents are State, private, or foreign entities accredited by USDA to certify domestic and foreign livestock producers and handlers as organic in accordance with OFPA and USDA organic regulations. Certifying agents determine if a producer or handler meets organic requirements, using detailed information from the operation about its specific practices and on-site inspection reports from organic inspectors. Currently, there are 79 certifying agents accredited under NOP; many of which certify operations based in the U.S. and abroad. AMS assumes all currently accredited certifying agents evaluate livestock operations for compliance with the USDA organic regulations and will therefore be subject to the amendments at §§ 205.238, 205.239, 205.241, 205.242, and 205.290.

Each entity seeking to continue USDA accreditation for livestock will need to submit information documenting its business practices including certification, enforcement and recordkeeping procedures and personnel qualifications (§ 205.504). AMS will review that information during its next scheduled on-site assessment to determine whether to continue accreditation for the scope of livestock. Certifying agents will need to annually update the above information and provide results of personnel performance evaluations and the internal review of its certification activities (§ 205.510).

AMS projects that the additional components of organic system plans for livestock may entail longer review times than those for other types of production systems. AMS estimates the annual collection cost per certifying agent will be $3,053.27. This estimate is based on an estimated 91.8 labor hours per year at $33.26 per hour for a total salary component of $3,053.27 per year. This value is assumed to be an underestimate as the certifying agent bears a portion of the burden of the inspector and certifying agents employ varying numbers of inspectors. The source of the hourly rate is the May 2015 National Occupational Employment and Wage Estimates, United States, published annually by the Bureau of Labor Statistics. The rate is the mean hourly wage for compliance officers (occupation code 13–1041). This classification was selected as an occupation with similar duties and responsibilities to that of a certifying agent.[25]

2. *Organic inspectors.* Inspectors conduct on-site inspections of certified operations and operations applying for certification and report the findings to the certifying agent. Inspectors may be the agents themselves, employees of the agents, or individual contractors. The USDA organic regulations call for certified operations to be inspected annually; a certifying agent may call for additional inspections on an as needed basis (§ 205.403(a)). Any individual who applies to conduct inspections of livestock operations will need to submit information documenting their qualifications to the certifying agent (§ 205.504(a)(3)). Inspectors will need to provide an inspection report to the certifying agent for each operation inspected (§ 205.403(e)). AMS projects that on average, inspectors will spend 3 hours longer than their current timeframe (10 hours) to complete an inspection report for livestock operations. This estimate is due to the additional components of the organic system plan that will need to be

[25] Compliance officers examine, evaluate, and investigate eligibility for or conformity with laws and regulations governing contract compliance of licenses and permits, and perform other compliance and enforcement inspection and analysis activities not classified elsewhere. Bureau of Labor Statistics, Occupational Employment and Wages, May 2015, 13–1041 Compliance Officers.

inspected. Inspectors do not have recordkeeping obligations; certifying agents maintain records of inspection reports.

According to the International Organic Inspectors Association (IOIA), there are approximately 250 inspectors currently inspecting crop, livestock, handling, and/or wild crop operations that are certified or have applied for certification. AMS assumes that approximately half (125) of these inspectors inspect livestock operations.

AMS estimates the annual collection cost per inspector to be $6,760. This estimate is based on an estimated 321 additional labor hours per year at $21.06 per hour for a total salary component of $6,760 per year. The source of the hourly rate is the May 2015 National Occupational Employment and Wage Estimates, United States, published annually by the Bureau of Labor Statistics. The rate is the mean hourly wage for agricultural inspectors (occupation code 45–2011).[26]

3. *Producers and handlers.* Domestic and foreign livestock producers and handlers will submit the following information to certifying agents: An application for certification, detailed descriptions of specific practices, annual updates to continue certification, and changes in their practices. Handlers include those who produce or transport livestock and may include bulk distributors, food and feed manufacturers, processors, or packers. Some handlers may be part of a retail operation that processes organic products in a location other than the premises of the retail outlet.

In order to obtain and maintain certification, livestock producers and handlers will need to develop and maintain an organic system plan. This is a requirement for all organic operations and the USDA organic regulations describe what information must be included in an organic system plan (§ 205.201). This final rule describes the additional information (§§ 205.238, 205.239, 205.241, 205.242, and 295.290) that will need to be included in a livestock operation's organic system plan in order to assess compliance. Certified operations are required to keep records about their organic production and/or handling for five years (§ 205.103(b)(3)).

AMS used the Organic Integrity Database to estimate the number of livestock operations that would be affected by this action.[27] According to that source, AMS estimates that 4,844 currently certified foreign and domestic livestock operations will be subject to the amendments at §§ 205.238, 205.239, 205.240, 205.241, 205.242, and 205.290. To estimate the number of livestock operations that will apply for and become certified on an annual basis, AMS assumed that this would be proportional to the estimated annual increase in certified operations (350). Therefore, AMS estimates that there will be 69 new certified organic livestock operations annually.

AMS estimates the annual collection and recordkeeping costs per organic livestock producer to be $559.45. This estimate is based on an estimated 16.65 labor hours per year at $33.60 per hour for a total salary component of $559.45 per year. AMS estimates that as producers adapt to the requirements introduced by the amendments at §§ 205.238, 205.239, 205.241, 205.242, and 205.290, the number of labor hours per year for currently certified operators will decrease. The source of the hourly rate is the May 2015 National Occupational Employment and Wage Estimates, United States, published annually by the Bureau of Labor Statistics. The rate is the mean hourly wage for farmers, ranchers and other agricultural managers (occupation code 11–9013).[28] Administrative costs for reporting and recordkeeping will vary among certified operators. Factors affecting costs include the type and size of operation, and the type of systems maintained.

Reporting Burden

Estimate of Burden: Public reporting burden for the collection of information is estimated to be 20.3 hours per year.

Respondents: Certifying agents, inspectors, and certified livestock operations.

Estimated Number of Respondents: 5,117.

Estimated Number of Responses: 42,522.

Estimated Total Annual Burden on Respondents: 104,124 hours.

Total Cost: $2,992,895.

Recordkeeping Burden

Estimate of Burden: Public recordkeeping burden is estimated to be an annual total of 5.18 hours per respondent.

Respondents: Livestock operations (including exempt operations).

Estimated Number of Respondents: 5,396.

Estimated Total Annual Burden on Respondents: 27,954 hours.

Total Cost: $939,240.

Grand Total of Reporting, Training & Recordkeeping Costs: $3,932,134

Comments: For the proposed rule, AMS invited comments from all interested parties concerning the information collection and recordkeeping required as a result of the proposed amendments to 7 CFR part 205. Comments were invited on: (1) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (2) the accuracy of the agency's estimate of the burden of the proposed collection of information including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

B. Discussion of Comments Received

AMS received a total of 6,675 written comments on the proposed rule, which addressed the proposed requirements for organic livestock production practices. AMS received 12 comments that addressed the information collection and recordkeeping burden estimates; two of these comments were duplicative. AMS did not make changes based on comments for several reasons. AMS received eight comments specifically objecting to the recordkeeping requirements, relative to the population of respondents. AMS expects that this is because this rule refers to specific, narrow documentation requirements that are already within the scope of the general recordkeeping requirements for organic producers and the components of an organic system plan. Specifically, such records fully disclose all activities in sufficient detail to be readily understood and audited and be sufficient to demonstrate compliance with the USDA organic regulations (7 CFR 205.103); and that an organic system plan must contain a description of practices and procedures to be performed, and monitoring

[26] Agricultural Inspectors inspect agricultural commodities, processing equipment, and facilities, and fish and logging operations, to ensure compliance with regulations and laws governing health, quality, and safety. Bureau of Labor Statistics, Occupational Employment and Wages, May 2015, 45–2011 Agricultural Inspectors.

[27] NOP 2016 List of certified USDA organic operations. Available at the USDA National Organic Program Organic Integrity Database, *http://apps.ams.usda.gov/nop/*.

[28] Farmers, Ranchers, and Other Agricultural Managers plan, direct, or coordinate the management or operation of farms, ranches, greenhouses, aquacultural operations, nurseries, timber tracts, or other agricultural establishments. Excludes ''First-Line Supervisors of Farming, Fishing, and Forestry Workers'' (45–1011).

practices to ensure the plan implemented (7 CFR 205.201). AMS believes, and some comments support this conclusion, that many organic producers already maintain the records that are specified in this rule as part of their organic system plans. In addition, AMS understands that numerous organic livestock producers also participate in third-party animal welfare certification programs and would likely maintain records concerning animal health/condition to participate in those programs. The comments to the questions posed in the proposed rule concerning reporting and recordkeeping requirements and AMS's responses are described below.

1. Whether the Proposed Collection of Information Is Necessary for the Proper Performance of the Functions of the Agency, Including Whether the Information Will Have Practical Utility

(Comment) While stating their support for more specific standards regarding the care of poultry and livestock in organic operations, four out of the ten comments expressed concerns about the specific records that would be required to document how animal illness and injury would be prevented and treated. In particular, these comments stated that body condition scoring and monitoring the causes and treatments of lameness as well as having a parasite management strategy and a written plan for the use of euthanasia was too prescriptive. One comment indicated that providing written justification for the use of teeth trimming and tail docking in pigs on a per litter basis would be burdensome while another comment was concerned about needing to document every instance of indoor confinement of poultry.

One comment indicated that quantifiable measures in the 2012 pasture rule had not necessarily increased consistency in interpretation or implementation by certifying agents or producers. This comment also noted that the prescriptive requirements and quantifiable measures in this new regulation would burden producers and certifying agents. The comment contends that this recordkeeping burden would lessen time for producers to perfect solutions on their operation and increase certifying agent and inspector focus on paper trail rather than assessing the livestock system as a whole.

(Response) Recordkeeping is a core principle of the organic program and an important tool for producers to demonstrate, and certifying agents to verify, compliance with the regulations. We believe that the requirements which specify specific documentation are minimal and are essential for verifying the rule is being implemented successfully.

2. The Accuracy of the Agency's Estimate of the Burden of the Proposed Collection of Information Including the Validity of the Methodology and Assumptions Used

(Comment) Two of the ten comments questioned the validity of the $3000.94 estimate of their annual costs, stating that it underestimated the direct labor hours that will be necessary to implement the new requirements. These comments spoke to the need for new forms, extensive training for personnel and certified operations, and processing additional compliance-related correspondence after the rule takes effect.

One comment estimated that each livestock file would require an additional 1-hour review which would amount to about 900 direct labor hours annually for this entity; this estimate is higher than the proposed rule estimate of 91.8 hours as an average for all certifying agents. Consequently, the comment stated that the additional annual labor costs would be $27,000 at $30 per hour. Alternatively, this comment expects most of their livestock operation inspections to require only one additional hour to inspect rather than the AMS estimate of three hours of additional inspection time per operation in the proposed rule. Whether the inspection takes one or three hours to verify these new requirements, the comments acknowledged that it is the client operations that will ultimately absorb the increased costs of inspections, and they will need time to prepare.

One comment from a certifying agent included a survey of its certified operations to determine if the records described in the proposed rule are necessary to enforce compliance with the standards. Overall, their clients (74.5 percent) reported that additional records are not needed with the largest group (40.1 percent) responding that they already keep more records than would be needed to enforce compliance. While a smaller proportion (25 percent) of their clients said that the records are needed to enforce compliance, the largest portion of that group of responders (21.8 percent) feel more records will be needed. The certifying agent also asked their clients to estimate how much additional time would be spent maintaining records with 89.3 percent stating somewhere between 1–40 hours annually. A much smaller portion expected to spend more than 40 hours per year maintaining records. In conclusion, the certifying agent acknowledged the difficulties with accurately estimating the labor hours that will be needed to establish and maintain the records, and affirmed that some requirements will be met through the current records already kept.

(Response) The estimates of total recordkeeping and reporting burden are average per-operation estimates based on the number of operations and animals across the whole industry. A certifying agent with a large number of livestock and poultry operation clients will have larger annual respective costs.

Describing the illness and injury prevention and treatment strategies in writing with useful monitoring and recordkeeping systems unique to the needs, species, and breeds of each operation in an organic system plan will require an initial investment of labor that may need to be absorbed. In actuality, these prevention strategies and monitoring systems should already be in place at least informally.

Based on one certifying agent's query, 75 percent of their client operations are already keeping the necessary records. The majority of the operations that reported the need for more recordkeeping reported that they see them as necessary, and one hour per week (greater than 40 hours annually) was the most direct labor hours reported by a small percentage of the certified operations queried. The query did not ask certified operations whether or not they perceived the necessary records as a burden. These recordkeeping systems should become routine over time and help operations become more efficient, thus reducing their management burden. The regulation provides marketplace assurance through verification.

3. Ways To Enhance the Quality, Utility, and Clarity of the Information To Be Collected

(Comment) One certifying agent affirmed that assessing the condition of the animals as well as the dietary rations provided is needed. This comment noted that a broad, integrated approach that observed the overall wellness of the animals was more appropriate. Indicators of poor health could be flagged without requiring the systemized use of body condition scoring.

A Land Grant College that works with smaller scale farmers through their extension services expressed general concern that some small farmers may no longer choose to be certified organic due to the costs and burdens of

recordkeeping. The organization perceived a duplication in reporting requirements being imposed on organic livestock operations. The comment also noted that the recordkeeping required to document food safety, labor, and environmental compliance has been increasing exponentially in recent decades as well, and is exacerbating the recordkeeping burden of farmers of all scales.

(Response) We agree that a broad integrated approach which observes the overall wellness of the animals, flags indicators of poor health, and scores body condition is important. Using a consistent recordkeeping system within an operation is more important than all operations using the same system, although it may be more efficient for inspectors if all certifying agents voluntarily select the same system.

AMS is not seeking to collect and compare data from one operation to another, or from one certifying agent to another. Body condition scoring is considered a low-cost, hands-on, internally consistent method to assess and monitor the condition of individual animals, herds, or flocks. Using a body scoring system is more accurate and efficient than relying on memory about animals' respective conditions, and helps producers identify the need for treatment or intervention. In addition, certifying agents should make every effort to be sure their recordkeeping requirements are not duplicative and coordinate with the requirements of other standards, where possible, that are outside of the direct scope of AMS.

4. Ways To Minimize the Burden of the Collection of Information on Those Who Are To Respond, Including the Use of Appropriate Automated, Electronic, Mechanical, or Other Technological Collection Techniques or Other Forms of Information Technology

(Comment) Three commenters requested that AMS provide monitoring form templates, training, and other resources in producer-friendly language and format, especially for body condition scoring. One certifying agent requested that we provide the tables that show the original rule language side-by-side with the final rule changes as a separate document for use in outreach materials and training.

A Land Grant College offered that they were likely to prepare new tools and templates to assist organic farmers with monitoring and recording lameness in individual animals. This comment also noted that new records would be needed to document when animals are restricted from outdoor access due to temperature fluctuations within the ranges specified in the rule.

(Response) AMS is considering developing tools to assist producers and certifying agents, especially for body condition scoring. These optional resources will be available on the NOP Web-site. AMS also plans to offer four regional trainings for producers and certifying agents—most likely in Pennsylvania, Iowa, California, and Texas. Other agricultural extension services and agents, the Natural Resources Conservation Service, and other Federal, state, and nonprofit organizations have tools and resources for monitoring animal health and living conditions that can be adapted.

XVII. Civil Rights Impact Analysis

AMS has reviewed this final rule in accordance with the Department Regulation 4300–4, Civil Rights Impact Analysis (CRIA), to address any major civil rights impacts the rule might have on minorities, women, and persons with disabilities. After a careful review of the rule's intent and provisions, AMS determined that this rule would only impact the organic practices of organic producers and that this rule has no potential for affecting producers in protected groups differently than the general population of producers. This rulemaking was initiated to clarify a regulatory requirement and enable consistent implementation and enforcement.

Protected individuals have the same opportunity to participate in the NOP as non-protected individuals. The USDA organic regulations prohibit discrimination by certifying agents. Specifically, § 205.501(d) of the current regulations for accreditation of certifying agents provides that ''No private or governmental entity accredited as a certifying agent under this subpart shall exclude from participation in or deny the benefits of the NOP to any person due to discrimination because of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status.'' Section 205.501(a)(2) requires ''certifying agents to demonstrate the ability to fully comply with the requirements for accreditation set forth in this subpart'' including the prohibition on discrimination. The granting of accreditation to certifying agents under § 205.506 requires the review of information submitted by the certifying agent and an on-site review of the certifying agent's client operation. Further, if certification is denied, § 205.405(d) requires that the certifying agent notify the applicant of their right to file an appeal to the AMS Administrator in accordance with § 205.681.

These regulations provide protections against discrimination, thereby permitting all producers, regardless of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status, who voluntarily choose to adhere to the rule and qualify, to be certified as meeting NOP requirements by an accredited certifying agent. This action in no way changes any of these protections against discrimination.

List of Subjects in 7 CFR Part 205

Administrative practice and procedure, Agriculture, Animals, Archives and records, Imports, Labeling, Organically produced products, Plants, Reporting and recordkeeping requirements, Seals and insignia, Soil conservation.

For the reasons set forth in the preamble, 7 CFR part 205 is amended as follows:

PART 205—NATIONAL ORGANIC PROGRAM

■ 1. The authority citation for part 205 continues to read as follows:

Authority: 7 U.S.C. 6501–6522.

■ 2. Section 205.2 is amended by adding definitions for ''Beak trimming'', ''Caponization'', ''Cattle wattling'', ''De-beaking'', ''De-snooding'', ''Dubbing'', ''Indoors or indoor space'', ''Mulesing'', ''Non-ambulatory'', ''Outdoors or outdoor space'', ''Perch'', ''Pullets'', ''Religious slaughter'', ''Soil'', ''Stocking density'', ''Toe clipping'', and ''Vegetation'' in alphabetical order to read as follows:

§ 205.2 Terms defined.

* * * * *

Beak trimming. The removal of not more than one-quarter to one-third of the upper beak or the removal of one-quarter to one-third of both the upper and lower beaks of a bird in order to control injurious pecking and cannibalism.

* * * * *

Caponization. Castration of chickens, turkeys, pheasants, and other avian species.

Cattle wattling. The surgical separation of two layers of the skin from the connective tissue for along a 2 to 4 inch path on the dewlap, neck, or shoulders used for ownership identification.

* * * * *

De-beaking. The removal of more than one-third of the upper beak or removal

of more than one-third of both the upper and lower beaks of a bird.

De-snooding. The removal of the turkey snood (a fleshy protuberance on the forehead of male turkeys).

* * * * *

Dubbing. The removal of poultry combs and wattles.

* * * * *

Indoors or indoor space. The space inside of an enclosed building or housing structure available to livestock. Indoor space for avian species includes, but is not limited to:

(1) *Mobile housing.* A mobile structure for avian species with solid or perforated flooring that is moved regularly during the grazing season.

(2) *Aviary housing.* A fixed structure for avian species that has multiple tiers or levels.

(3) *Slatted/mesh floor housing.* A fixed structure for avian species that has both: (1) A slatted floor where perches, feed, and water are provided over a pit or belt for manure collection; and

(ii) Litter covering the remaining solid floor.

(4) *Floor litter housing.* A fixed structure for avian species that has absorbent litter covering the entire floor.

* * * * *

Mulesing. The removal of skin from the buttocks of sheep, approximately 2 to 4 inches wide and running away from the anus to the hock to prevent fly strike.

* * * * *

Non-ambulatory. As defined in 9 CFR 309.2(b).

* * * * *

Outdoors or outdoor space. Any area outside an enclosed building or enclosed housing structure, including roofed areas that are not enclosed. Outdoor space for avian species includes, but is not limited to:

(1) *Pasture pens.* Floorless pens, with full or partial roofing, that are moved regularly and provide direct access to soil and vegetation.

(2) *[Reserved]*

* * * * *

Perch. A rod or branch type structure above the floor of the house that accommodates roosting, allowing birds to utilize vertical space in the house

* * * * *

Pullets. Female chickens being raised for egg production that have not yet started to lay eggs.

* * * * *

Ritual slaughter. Slaughtering in accordance with the ritual requirements of the Jewish faith or any other religious faith that prescribes a method of slaughter whereby the animal suffers loss of consciousness by anemia of the brain caused by the simultaneous and instantaneous severance of the carotid arteries with a sharp instrument and handling in connection with such slaughtering.

* * * * *

Soil. The outermost layer of the earth comprised of minerals, water, air, organic matter, fungi, and bacteria in which plants may grow roots.

* * * * *

Stocking density. The weight of animals on a given area or unit of land.

* * * * *

Toe clipping. The removal of the nail and distal joint of the back two toes of a bird.

* * * * *

Vegetation. Living plant matter that is anchored in the soil by roots and provides ground cover.

* * * * *

■ 3. Section 205.238 is revised to read as follows:

§ 205.238 Livestock care and production practices standard.

(a) The producer must establish and maintain preventive health care practices, including:

(1) Selection of species and types of livestock with regard to suitability for site-specific conditions and resistance to prevalent diseases and parasites.

(2) Provision of a feed ration sufficient to meet nutritional requirements, including vitamins, minerals, proteins and/or amino acids, fatty acids, energy sources, and fiber (ruminants), resulting in appropriate body condition.

(3) Establishment of appropriate housing, pasture conditions, and sanitation practices to minimize the occurrence and spread of diseases and parasites.

(4) Provision of conditions which allow for exercise, freedom of movement, and reduction of stress appropriate to the species.

(5) Physical alterations may be performed to benefit the welfare of the animals, for identification purposes, or for safety purposes. Physical alterations must be performed on livestock at a reasonably young age, with minimal stress and pain and by a competent person.

(i) The following practice may not be routinely used and must be used only with documentation that alternative methods to prevent harm failed: Needle teeth clipping (no more than top one-third of the tooth) in pigs and tail docking in pigs.

(ii) The following practices are prohibited: De-beaking, de-snooding, caponization, dubbing, toe clipping of chickens, toe clipping of turkeys unless with infra-red at hatchery, beak trimming after 10 days of age, tail docking of cattle, wattling of cattle, face branding of cattle, tail docking of sheep shorter than the distal end of the caudal fold, and mulesing of sheep.

(6) Administration of vaccines and other veterinary biologics.

(7) All surgical procedures necessary to treat an illness shall be undertaken in a manner that employs best management practices in order to minimize pain, stress, and suffering, with the use of appropriate and allowed anesthetics, analgesics, and sedatives.

(8) Monitoring of lameness and keeping records of the percent of the herd or flock suffering from lameness and the causes. Certified operations may monitor lameness in a manner prescribed by the NOP.

(b) Producers may administer medications that are allowed under 205.603 to alleviate pain or suffering, and when preventive practices and veterinary biologics are inadequate to prevent sickness. Parasiticides allowed under § 205.603 may be used on:

(1) Breeder stock, when used prior to the last third of gestation but not during lactation for progeny that are to be sold, labeled, or represented as organically produced; and

(2) Dairy stock, when used a minimum of 90 days prior to the production of milk or milk products that are to be sold, labeled, or represented as organic.

(c) An organic livestock operation must not:

(1) Sell, label, or represent as organic any animal or product derived from any animal treated with antibiotics, any substance that contains a synthetic substance not allowed under § 205.603, or any substance that contains a nonsynthetic substance prohibited in § 205.604. Milk from animals undergoing treatment with synthetic substances allowed under § 205.603 cannot be sold as organic but may be fed to calves on the same operation. Milk from animals undergoing treatment with prohibited substances cannot be sold as organic or fed to organic livestock.

(2) Administer synthetic medications unless:

(i) In the presence of illness or to alleviate pain and suffering, and

(ii) That such medications are allowed under § 205.603.

(3) Administer hormones for growth promotion, production, or reproduction, except as provided in § 205.603.

(4) Administer synthetic parasiticides on a routine basis.

(5) Administer synthetic parasiticides to slaughter stock.

(6) Administer animal drugs in violation of the Federal Food, Drug, and Cosmetic Act; or

(7) Withhold medical treatment from a sick animal in an effort to preserve its organic status. All appropriate medications must be used to restore an animal to health when methods acceptable to organic production fail. Livestock treated with a prohibited substance must be clearly identified and neither the animal nor its products shall be sold, labeled, or represented as organically produced.

(8) Withhold individual treatment designed to minimize pain and suffering for injured, diseased, or sick animals, which may include forms of euthanasia as recommended by the American Veterinary Medical Association.

(9) Neglect to identify and record treatment of sick and injured animals in animal health records.

(10) Practice forced molting or withdrawal of feed to induce molting.

(d) Organic livestock operations must have comprehensive plans to minimize internal parasite problems in livestock. The plan will include preventive measures such as pasture management, fecal monitoring, and emergency measures in the event of a parasite outbreak. Parasite control plans shall be approved by the certifying agent.

(e) *Euthanasia.* (1) Organic livestock operations must have written plans for prompt, humane euthanasia for sick or injured livestock.

(2) The following methods of euthanasia are not permitted: suffocation; manual blow to the head by blunt instrument or manual blunt force trauma; and the use of equipment that crushes the neck, including killing pliers or Burdizzo clamps.

(3) Following a euthanasia procedure, livestock must be carefully examined to ensure that they are dead.

■ 4. Section 205.239 is revised to read as follows:

§ 205.239 Mammalian livestock living conditions.

(a) The producer of an organic livestock operation must establish and maintain year-round livestock living conditions which accommodate the wellbeing and natural behavior of animals, including:

(1) Year-round access for all animals to the outdoors, shade, shelter, exercise areas, fresh air, clean water for drinking, and direct sunlight, suitable to the species, its stage of life, the climate, and the environment: Except, that, animals may be temporarily denied access to the outdoors in accordance with paragraphs (b) and (c) of this section. Yards, feeding pads, and feedlots may be used to provide ruminants with access to the outdoors during the non-grazing season and supplemental feeding during the grazing season. Yards, feeding pads, and feedlots shall be large enough to allow all ruminant livestock occupying the yard, feeding pad, or feedlot to feed without competition for food. Continuous total confinement of any animal indoors is prohibited. Continuous total confinement of ruminants in yards, feeding pads, and feedlots is prohibited.

(2) For all ruminants, management on pasture and daily grazing throughout the grazing season(s) to meet the requirements of § 205.237, except as provided for in paragraphs (b), (c), and (d) of this section.

(3) Appropriate clean, dry bedding. When roughages are used as bedding, they shall have been organically produced in accordance with this part by an operation certified under this part, except as provided in § 205.236(a)(2)(i), and, if applicable, organically handled by operations certified to the NOP.

(4) Shelter designed to allow for:

(i) Over a 24-hour period, sufficient space and freedom to lie down, turn around, stand up, fully stretch their limbs, and express normal patterns of behavior;

(ii) Temperature level, ventilation, and air circulation suitable to the species;

(iii) Reduction of potential for livestock injury; and

(iv) If indoor housing is provided, areas for bedding and resting that are sufficiently large, solidly built, and comfortable so that animals are kept clean, dry, and free of lesions.

(5) The use of yards, feeding pads, feedlots and laneways that shall be well-drained, kept in good condition (including frequent removal of wastes), and managed to prevent runoff of wastes and contaminated waters to adjoining or nearby surface water and across property boundaries.

(6) Housing, pens, runs, equipment, and utensils shall be properly cleaned and disinfected as needed to prevent cross-infection and build-up of disease-carrying organisms.

(7) Dairy young stock may be housed in individual pens until completion of the weaning process but no later than 6 months of age, provided that they have enough room to turn around, lie down, stretch out when lying down, get up, rest, and groom themselves; individual animal pens shall be designed and located so that each animal can see, smell, and hear other calves.

(8) Swine must be housed in a group, except:

(i) Sows may be housed individually at farrowing and during the suckling period;

(ii) Boars; and

(iii) Swine with documented instance of aggression or recovery from an illness.

(9) Piglets shall not be kept on flat decks or in piglet cages.

(10) For swine, rooting materials must be provided, except during the farrowing and suckling period.

(11) In confined housing with stalls for mammalian livestock, enough stalls must be present to provide for the natural behaviors of the animals. A cage must not be called a stall. For group-housed swine, the number of individual feeding stalls may be less than the number of animals, as long as all animals are fed routinely over a 24-hour period. For group-housed cattle, bedded packs, compost packs, tie-stalls, free-stalls, and stanchion barns are all acceptable housing as part of an overall organic system plan.

(12) Outdoor space must be provided year-round. When the outdoor space includes soil, maximal vegetative cover must be maintained as appropriate for the season, climate, geography, species of livestock, and stage of production.

(b) The producer of an organic livestock operation may provide temporary confinement or shelter for an animal because of:

(1) Inclement weather;

(2) The animal's stage of life, however, lactation is not a stage of life that would exempt ruminants from any of the mandates set forth in this part;

(3) Conditions under which the health, safety, or well-being of the animal could be jeopardized;

(4) Risk to soil or water quality;

(5) Preventive healthcare procedures or for the treatment of illness or injury (neither the various life stages nor lactation is an illness or injury);

(6) Sorting or shipping animals and livestock sales, provided that the animals shall be maintained under continuous organic management, including organic feed, throughout the extent of their allowed confinement;

(7) Breeding: Except, that, animals shall not be confined any longer than necessary to perform the natural or artificial insemination. Animals may not be confined to observe estrus; and

(8) 4–H, National FFA Organization, and other youth projects, for no more than one week prior to a fair or other demonstration, through the event, and up to 24 hours after the animals have arrived home at the conclusion of the event. These animals must have been maintained under continuous organic management, including organic feed,

during the extent of their allowed confinement for the event. Notwithstanding the requirements in paragraph (b)(6) of this section, facilities where 4–H, National FFA Organization, and other youth events are held are not required to be certified organic for the participating animals to be sold as organic, provided all other organic management practices are followed.

(c) The producer of an organic livestock operation may, in addition to the times permitted under paragraph (b) of this section, temporarily deny a ruminant animal pasture or outdoor access under the following conditions:

(1) One week at the end of a lactation for dry off (for denial of access to pasture only), three weeks prior to parturition (birthing), parturition, and up to one week after parturition;

(2) In the case of newborn dairy cattle for up to six months, after which they must be on pasture during the grazing season and may no longer be individually housed: Except, That, an animal shall not be confined or tethered in a way that prevents the animal from lying down, standing up, fully extending its limbs, and moving about freely;

(3) In the case of fiber bearing animals, for short periods for shearing; and

(4) In the case of dairy animals, for short periods daily for milking. Milking must be scheduled in a manner to ensure sufficient grazing time to provide each animal with an average of at least 30 percent DMI from grazing throughout the grazing season. Milking frequencies or duration practices cannot be used to deny dairy animals pasture.

(d) Ruminant slaughter stock, typically grain finished, shall be maintained on pasture for each day that the finishing period corresponds with the grazing season for the geographical location. Yards, feeding pads, or feedlots may be used to provide finish feeding rations. During the finishing period, ruminant slaughter stock shall be exempt from the minimum 30 percent DMI requirement from grazing. Yards, feeding pads, or feedlots used to provide finish feeding rations shall be large enough to allow all ruminant slaughter stock occupying the yard, feeding pad, or feed lot to feed without crowding and without competition for food. The finishing period shall not exceed one-fifth (1/5) of the animal's total life or 120 days, whichever is shorter.

(e) The producer of an organic livestock operation must manage manure in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, heavy metals, or pathogenic organisms and optimizes recycling of nutrients and must manage pastures and other outdoor access areas in a manner that does not put soil or water quality at risk.

■ 5. Section 205.241 is added to read as follows:

§ 205.241 Avian living conditions.

(a) The producer of an organic poultry operation must establish and maintain year-round poultry living conditions that accommodate the health and natural behavior of poultry, including: Year-round access to outdoors; shade; shelter; exercise areas; fresh air; direct sunlight; clean water for drinking; materials for dust bathing; and adequate outdoor space to escape aggressive behaviors suitable to the species, its stage of life, the climate, and environment. Poultry may be temporarily denied access to the outdoors in accordance with paragraph (d) of this section.

(b) Indoor space requirements—

(1) Poultry housing must be sufficiently spacious to allow all birds to move freely, stretch their wings, stand normally, and engage in natural behaviors.

(2) Producers must monitor ammonia levels at least monthly and implement practices to maintain ammonia levels below 10 ppm. When ammonia levels exceed 10 ppm, producers must implement additional practices and additional monitoring to reduce ammonia levels below 10 ppm. Ammonia levels must not exceed 25 ppm.

(3) For layers and fully feathered birds, artificial light may be used to prolong the day length, to provide up to 16 hours of continuous light. Artificial light intensity must be lowered gradually to encourage hens to move to perches or settle for the night. Natural light must be sufficient indoors on sunny days so that an inspector can read and write when all lights are turned off.

(4) Exit areas—poultry houses must have sufficient exit areas that are appropriately distributed to ensure that all birds have ready access to the outdoors.

(5) Perches—for layers (*Gallus gallus*), six inches of perch space must be provided per bird. Perch space may include the alighting rail in front of the nest boxes. All layers must be able to perch at the same time except for aviary housing, in which 55 percent of layers must be able to perch at the same time.

(6) All birds must have access to areas in the house that allow for scratching and dust bathing. Litter must be provided and maintained in a dry condition.

(7) Houses with slatted/mesh floors must have 30 percent minimum of solid floor area available with sufficient litter available for dust baths so that birds may freely dust bathe without crowding.

(8) For layers (*Gallus gallus*), indoor stocking density must not exceed (live bird weight):

(i) Mobile housing: 4.5 pounds per square foot.

(ii) Aviary housing: 4.5 pounds per square foot.

(iii) Slatted/mesh floor housing: 3.75 pounds per square foot.

(iv) Floor litter housing: 3.0 pounds per square foot.

(v) Other housing: 2.25 pounds per square foot.

(9) For pullets (*Gallus gallus*), indoor stocking density must not exceed 3.0 pounds of bird per square foot.

(10) For broilers (*Gallus gallus*), indoor stocking density must not exceed 5.0 pounds of bird per square foot.

(11) Indoor space includes flat areas available to birds, excluding nest boxes.

(12) Indoor space may include enclosed porches and lean-to type structures (*e.g.* screened in, roofed) as long as the birds always have access to the space, including during temporary confinement events. If birds do not have continuous access to the porch during temporary confinement events, this space must not be considered indoors.

(c) Outdoor space requirements—

(1) Access to outdoor space and door spacing must be designed to promote and encourage outside access for all birds on a daily basis. Producers must provide access to the outdoors at an early age to encourage (*i.e.,* train) birds to go outdoors. Birds may be temporarily denied access to the outdoors in accordance with § 205.241(d).

(2) At least 50 percent of outdoor space must be soil. Outdoor space with soil must include maximal vegetative cover appropriate for the season, climate, geography, species of livestock, and stage of production. Vegetative cover must be maintained in a manner that does not provide harborage for rodents and other pests.

(3) Shade may be provided by structures, trees, or other objects in the outdoor area.

(4) For layers (*Gallus gallus*), outdoor space must be provided at a rate of no less than one square foot for every 2.25 pounds of bird in the flock.

(5) For pullets (*Gallus gallus*), outdoor space must be provided at a rate of no less than one square foot for every 3.0 pounds of bird in the flock.

(6) For broilers (*Gallus gallus*), outdoor space must be provided at a rate of no less than one square foot for every 5.0 pounds of bird in the flock.

(7) Outdoor space may include porches and lean-to type structures that are not enclosed (*e.g.* with roof, but with screens removed) and allow birds to freely access other outdoor space.

(d) The producer of an organic poultry operation may temporarily confine birds. Confinement must be recorded. Operations may temporarily confine birds when one of the following circumstances exists:

(1) Inclement weather, including when air temperatures are under 40 degrees F or above 90 degrees F.

(2) The animal's stage of life, including:

(i) The first 4 weeks of life for broilers (*Gallus gallus*);

(ii) The first 16 weeks of life for pullets (*Gallus gallus*); and

(iii) Until fully feathered for bird species other than *Gallus gallus.*

(3) Conditions under which the health, safety, or well-being of the animal could be jeopardized.

(4) Risk to soil or water quality, including to establish vegetation by reseeding the outdoor space.

(5) Preventive healthcare procedures or for the treatment of illness or injury (neither various life stages nor egg laying is an illness or injury).

(6) Sorting or shipping birds and poultry sales, provided that the birds are maintained under continuous organic management, throughout the extent of their allowed confinement.

(7) For nest box training, provided that birds shall not be confined any longer than required to establish the proper behavior. Confinement must not exceed five weeks.

(8) For 4–H, National FFA Organization, and other youth projects, provided that temporary confinement for no more than one week prior to a fair or other demonstration, through the event, and up to 24 hours after the birds have arrived home at the conclusion of the event. During temporary confinement, birds must be under continuous organic management, including organic feed, for the duration of confinement. Notwithstanding the requirements in paragraph (d)(6) of this section, facilities where 4–H, National FFA Organization, and other youth events are held are not required to be certified organic for the participating birds to be sold as organic, provided all other organic management practices are followed.

(e) The producer of an organic poultry operation must manage manure in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, heavy metals, or pathogenic organisms. The producer must also optimize recycling of nutrients and must manage outdoor access in a manner that does not put soil or water quality at risk.

■ 6. Section 205.242 is added to read as follows:

§ 205.242 Transport and slaughter.

(a) *Transportation.* (1) Certified organic livestock must be clearly identified as organic, and this identity must be traceable for the duration of transport.

(2) All livestock must be fit for transport to buyers, auction or slaughter facilities.

(i) Calves must have a dry navel cord and be able to stand and walk without human assistance.

(ii) Non-ambulatory animals must not be transported for sale or slaughter. Such animals may be medically treated or euthanized.

(3) Adequate and season-appropriate ventilation is required for all livestock trailers, shipping containers, and any other mode of transportation used to protect animals against cold and heat stresses.

(4) Bedding must be provided on trailer floors and in holding pens as needed to keep livestock clean, dry, and comfortable during transport and prior to slaughter. Bedding is not required in poultry crates. When roughages are used for bedding, they must be certified organic.

(5) Arrangements for water and organic feed must be made if transport time, including all time on the mode of transportation, exceeds 12 hours.

(i) The producer or handler of an organic livestock operation, who is responsible for overseeing the transport of organic livestock, must provide records to certifying agents during inspections or upon request that demonstrate that transport times for organic livestock are not detrimental to the welfare of the animals and meet the requirements of paragraph (a)(5) of this section.

(6) Organic producers and handlers, who are responsible for overseeing the transport of organic livestock, must have emergency plans in place that adequately address possible animal welfare problems that might occur during transport.

(b) *Mammalian slaughter.* (1) Producers and handlers who slaughter organic livestock must be in compliance, as determined by FSIS, with the Federal Meat Inspection Act (21 U.S.C. 603(b) and 21 U.S.C. 610(b)), the regulations at 9 CFR part 313 regarding humane handling and slaughter of livestock, and the regulations of 9 CFR part 309 regarding ante-mortem inspection.

(2) Producers and handlers who slaughter organic exotic animals must be in compliance with the Agricultural Marketing Act of 1946 (7 U.S.C. 1621, *et seq.),* the regulations at 9 CFR parts 313 and 352 regarding the humane handling and slaughter of exotic animals, and the regulations of 9 CFR part 309 regarding ante-mortem inspection.

(3) Producers and handlers who slaughter organic livestock or exotic animals must provide all noncompliance records related to humane handling and slaughter issued by the controlling national, federal, or state authority and all records of subsequent corrective actions to certifying agents during inspections or upon request.

(c) *Avian slaughter.* (1) Producers and handlers who slaughter organic poultry must be in compliance, as determined by FSIS, with the Poultry Products Inspection Act requirements (21 U.S.C. 453(g)(5)); the regulations at paragraph (v) of the definition of ''*Adulterated*'' in 9 CFR 381.1(b), and 9 CFR 381.90, and 381.65(b)); and FSIS Directives 6100.3 and 6910.1.

(2) Producers and handlers who slaughter organic poultry must provide all noncompliance records related to the use of good manufacturing practices in connection with slaughter issued by the controlling national, federal, or state authority and all records of subsequent corrective actions to the certifying agent at inspection or upon request.

(3) Producers and handlers who slaughter organic poultry, but are exempt from or not covered by the requirements of the Poultry Products Inspection Act, must ensure that:

(i) No lame birds may be shackled, hung, or carried by their legs;

(ii) All birds shackled on a chain or automated system must be stunned prior to exsanguination, with the exception of ritual slaughter; and

(iii) All birds must be irreversibly insensible prior to being placed in the scalding tank.

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Elanor Starmer,

Administrator, Agricultural Marketing Service.

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