

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 205

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

RIN 0581–AD44

National Organic Program; Organic Livestock and Poultry Practices

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Proposed rule.

SUMMARY: The United States Department of Agriculture’s (USDA) Agricultural Marketing Service (AMS) proposes to amend 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 health care practices and mammalian living conditions.

DATES: Comments must be received by June 13, 2016.

ADDRESSES: Interested parties may submit written comments on this proposed rule using one of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.
- *Mail:* Paul Lewis Ph.D., Director Standards Division, National Organic Program, USDA–AMS–NOP, Room 2646–So., Ag Stop 0268, 1400 Independence Ave. SW., Washington, DC 20250–0268.

Instructions: All submissions received must include the docket number AMS–NOP–15–0012; NOP–15–06PR, and/or Regulatory Information Number (RIN) 0581–AD44 for this rulemaking. Commenters should identify the topic and section of the proposed rule to which their comment refers. All commenters should refer to the GENERAL INFORMATION section for more information on preparing your comments. All comments received will be posted without change to <http://www.regulations.gov>.

Docket: For access to the docket, including background documents and comments received, go to <http://www.regulations.gov>.

www.regulations.gov. Comments submitted in response to this proposed rule will also be available for viewing in person at USDA–AMS, National Organic Program, Room 2646–South Building, 1400 Independence Ave. SW., Washington, DC, from 9 a.m. to 12 noon and from 1 p.m. to 4 p.m., Monday through Friday (except official Federal holidays). Persons wanting to visit the USDA South Building to view comments received in response to this proposed rule are requested to make an appointment in advance by calling (202) 720–3252.

FOR FURTHER INFORMATION CONTACT: Paul Lewis, Ph.D., Director of Standards Division, Telephone: (202) 720–3252; Fax: (202) 205–7808.

SUPPLEMENTARY INFORMATION:

Executive Summary

A. Purpose of Proposed Rule

This proposed rule would create greater consistency in organic livestock practices. AMS has determined that the current USDA organic regulations (7 CFR part 205) covering livestock health care practices and living conditions need 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). By facilitating improved compliance and enforcement of the USDA organic regulations, the proposed regulations would better satisfy consumer expectations that organic livestock meet a uniform and verifiable animal welfare standard.

Specifically, this proposed action would:

1. Clarify how producers and handlers must treat livestock and poultry to ensure their health and wellbeing.
2. Clarify 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 would be prohibited.

3. Set maximum indoor and outdoor stocking density for avian species, which would vary depending on the type of production and stage of life.

4. Define outdoor access to exclude the use of structures with solid roofing for outdoor access and require livestock and poultry to have contact with soil.

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

6. Clarify 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 provide for the enforcement of USDA organic regulations based on FSIS inspection findings.

B. Summary of Provisions

This proposed rule would provide specificity on livestock health care practices, such as which physical alteration procedures are prohibited or restricted for use on organic livestock. The proposed livestock health care practice standards include requirements for euthanasia to reduce suffering of any sick or disabled livestock. To improve upon the current standards, this proposed rule would set separate standards for mammalian and avian livestock living conditions to better reflect the needs and behaviors of the different species, as well as related consumer expectations. The proposed mammalian livestock standards would cover both ruminants and swine. The proposed avian living standards would set maximum indoor and outdoor stocking densities to ensure the birds have sufficient space to engage in natural behaviors. This proposed rule would add new requirements on the transport of organic livestock to sale or slaughter. This proposed rule would also add a new section to clarify how organic slaughter facility practices and FSIS regulations work together to support animal welfare.

C. Costs and Benefits

AMS estimates the following costs and benefits of this proposed rule.

Costs	Benefits
Production: \$9.5–24.1 million per year (annualized over 13 years) Paperwork burden: \$3.6 million annually.	Qualitative: Establishes a clear standard protecting the value of the USDA organic seal to consumers. Facilitates level enforcement of organic livestock and poultry standards.

Costs	Benefits
	Quantitative: \$14.7–62.6 million per year (annualized over 13 years).

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I. General Information

A. Does this action apply to me?

You may be potentially affected by this action if you are engaged in the meat, egg, poultry, dairy, or animal fiber industries. Potentially 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 proposed 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**.

B. What should I consider as I prepare my comments for AMS?

Your comments should clearly indicate whether or not they support the proposed action for any or all of the items in this proposed rule. You should clearly indicate the reason(s) for the stated position. Your comments should also offer any recommended language changes that would be appropriate for your position. Please include relevant information and data to further support your position (e.g. scientific, environmental, industry impact information, etc.).

Specifically, AMS is requesting comments on the following topics:

1. The clarity of the proposed requirements: Can farmers, handlers, and certifying agents readily determine how to comply with the proposed regulations?
2. The accuracy of the assumptions and estimates in the Regulatory Impact Analysis and Regulatory Flexibility Analysis pertaining to organic poultry and egg production. In addition, the accuracy of AMS' assertion that the proposed requirements pertaining to mammalian livestock codify current practices among these organic producers
3. The implementation approach and timeframe. AMS is proposing that all provisions of this rule must be implemented within one year of the publication date of the final rule except for the outdoor space requirements for avian species. AMS is proposing two distinct implementation timeframes for the outdoor space requirements for poultry: (1) Three years after the publication of the final rule any non-certified facility would need to comply in order to obtain certification; (2) all facilities certified prior to that three-year mark would need to comply within five years of the publication of the final rule.

II. Background

This proposed rule addresses health care, transport, slaughter and living conditions for organic livestock. However, the provisions for outdoor access for poultry have a long history of agency and NOSB actions and are a focal issue. Outdoor access practices, particularly for organic layers, vary; some operations provide large, open-air outdoor areas, while others provide minimal outdoor space or use screened, covered enclosures commonly called

“porches” to provide outdoor space. An audit in 2010 conducted by the USDA Office of the Inspector General identified inconsistencies in certification practices regarding the use of porches as outdoor space. To address that finding, AMS issued draft guidance. However, after public comment, AMS determined that rulemaking was necessary to resolve the divergent outdoor access practices for organic poultry and did not finalize the guidance. To assist with the rulemaking, the National Organic Standards Board (NOSB) developed a series of recommendations to clarify organic livestock healthcare, transport, slaughter, and living conditions, including outdoor access for poultry. The NOSB deliberation process revealed broad support within the organic community and consumer expectations for specific guidelines for animal care, including meaningful outdoor access for poultry.

A. Current Organic Livestock Standards

OFPA authorizes the establishment of national standards for the marketing of organically produced agricultural products. AMS administers the National Organic Program (NOP), which oversees the development and implementation of the national standards for the production, handling and marketing of organically produced agricultural products. Section 6509 of OFPA authorizes the USDA to implement regulations regarding standards for organic livestock products. Furthermore, OFPA authorizes the creation of the NOSB to advise USDA about the implementation of standards and practices for organic production (7 U.S.C. 6518). The NOSB is a 15-member Federal Advisory Board appointed by the Secretary of Agriculture which meets in public twice annually. OFPA specifies the composition of the NOSB and reserves four NOSB seats for producers/growers, two seats for handlers/processors. The NOSB solicits public comment on topics related to the USDA organic regulations to inform its public deliberations and decision making at the open meetings. Any NOSB recommendations to amend the USDA organic regulations must be implemented through the notice and comment rulemaking process.

The current USDA organic regulations have broad and general requirements for

ensuring the welfare of certified organic livestock and poultry. These regulations accommodate various livestock production situations. For all livestock, the regulations require: an environment that allows animals to express natural behaviors; preventive health care to reduce the likelihood of illness; and protection from conditions that jeopardize an animal's well-being, such as predators and adverse weather.

The management of domesticated animals requires that they be contained in some manner, either to prevent them from running away or to protect them from harm. In organic management systems, securing animal access areas is important to ensure animals do not come into contact with prohibited substances or eat nonorganic feed. However, the degree to which animals are restrained or contained in pens, cages, paddocks, or other enclosures, may affect their ability to exercise their natural behaviors.

Consistent with organic farming principles, the USDA organic regulations require housing and living conditions that allow animals to freely exercise their natural behaviors. Natural behaviors are species-specific. Therefore, for example, the USDA organic regulations require that ruminants graze at least 120 days per year and receive 30 percent of dry matter intake from grazing. The regulations also describe situations that warrant denying ruminant animals access to pasture or the outdoors, *e.g.*, for newborn dairy cattle up to six months. This level of specificity, however, is not currently provided for avian species and some mammalian, non-ruminant livestock.

Further, certifying agents inspect each organic operation and decide whether or not to certify the operation. Certifying agents must consider site-specific conditions, including prevalent pests and diseases, weather, and natural resources of the operation when determining the acceptability of a particular management practice. This flexibility, combined with numerous combinations of environmental, cultural, and economic factors, results in variation in the manner in which the regulations are applied. For example, in organic poultry production, outdoor access ranges from extensive pasture to roofed enclosures, *i.e.*, porches with no access to soil or vegetation. This disparity in amounts of outdoor access has economic implications for producers and lessens consumer confidence in the organic label.

B. NOSB Recommendations

Between 1994 and 2011, the NOSB made nine recommendations regarding livestock health and welfare in organic production. Between 1997 and 2000, AMS issued two proposed rules and a final rule regarding national standards for the production and handling of organic products, including livestock and their products. The NOSB as well as members of the public commented on these rulemakings with regard to the health and welfare of livestock. Key actions from that period, which led to the development of the existing standards on organic livestock, are summarized below.

(1) In June 1994, the NOSB recommended a series of provisions to address the care and handling of livestock on organic farms. Within this recommendation, the NOSB developed much of the framework for organic care and welfare of animals, including health care standards, living conditions and transportation of livestock practices.

(2) In April and October 1995, the NOSB made a series of recommendations as addendums to the June 1994 recommendations. These recommendations further addressed various health care practices, a requirement for outside access, and the use of vaccines.

(3) On December 16, 1997, AMS responded to the 1994 and 1995 NOSB recommendations in a proposed rule to establish the NOP (62 FR 65850). Consistent with the NOSB's recommendation, the proposed language would have required that organic livestock producers develop a preventive health care plan and use synthetic drugs only if preventive measures failed. The 1997 proposed rule also included standards for livestock living conditions, including when animals would be permitted to be confined. This proposed rule was not finalized.

(4) In March 1998, the NOSB reaffirmed its earlier recommendations on animal health care and living conditions. The 1998 NOSB recommendation also stressed the importance of treating sick livestock by recommending that any organic producer who did not take specified actions to provide care for a diseased animal would lose certification. This recommendation also included provisions to clarify when livestock could be confined indoors and defined "outdoors" as having direct access to sunshine.

(5) On March 13, 2000, AMS published a second proposed rule to establish the National Organic Program

(65 FR 13512). AMS responded to the NOSB's March 1998 recommendation on animal health care and living conditions in this proposed rule. AMS proposed that organic producers must use disease prevention practices first, then approved synthetic medications only if preventive measures failed. However, a producer would need to use all appropriate measures to save the animal even if the animal lost organic status. In addition, AMS proposed that the living conditions for organic livestock must maintain the health of the animals and allow for natural behaviors, including access to the outdoors.

(6) On December 21, 2000, AMS published a final rule establishing the USDA organic regulations (65 FR 80548). Through this action, AMS finalized the standards for health care practices and livestock living conditions. That rule became effective on February 20, 2001, and was fully implemented on October 21, 2002.

(7) In May 2002, the NOSB again addressed outdoor access, stating this should include open air and direct access to sunshine.¹ In addition, the May 2002 recommendation stated that bare surfaces other than soil do not meet the intent of outdoor access for poultry. This recommendation also included clarifications as to when livestock could be temporarily confined.

(8) In March 2005, the NOSB recommended that the temporary confinement provision for "stage of production" be changed to "stage of life."² The NOSB reasoned that "stage of life" would more appropriately allow livestock to be temporarily confined even if they were not producing milk or eggs at the time of confinement.

(9) On October 24, 2008, AMS published a proposed rule on access to pasture for ruminant livestock (73 FR 63584). AMS published the final rule, Access to Pasture (Livestock) (75 FR 7154), on February 17, 2010 (75 FR 7154). This rule was based on several NOSB recommendations regarding ruminant livestock feed and living conditions. This rule set a requirement that ruminants obtain a minimum of 30 percent dry matter intake from grazing during the grazing season.

(10) Between 2009 and 2011, the NOSB issued a series of

¹ NOSB, 2002. Recommendation Access to Outdoors for Poultry. Available at: <http://www.ams.usda.gov/rules-regulations/organic/nosb/recommendations>.

² NOSB, 2005. Formal Recommendation by the NOSB to the NOP. NOSB recommendation for Rule change—"Stage of Production" to "Stage of Life." Available at: <http://www.ams.usda.gov/rules-regulations/organic/nosb/recommendations>.

recommendations on animal welfare. These were intended to incorporate prior NOSB recommendations that AMS had not addressed. The November 2009 recommendation suggested revisions and additions to the livestock health care practice standards and living conditions standards.³ The NOSB recommended banning or restricting certain physical alterations and requiring organic producers to keep records on animals which were lame and/or sick and how they were treated. This recommendation proposed to separate mammalian living conditions from avian living conditions sections of the USDA organic regulations so that the provisions could be more directly tailored to various livestock species. In the mammalian section, the NOSB proposed mandatory group housing of swine and a requirement for rooting materials for swine. In the avian section, the NOSB proposed a variety of provisions, including maximum ammonia levels, perch space requirements and outdoor access clarifications.

(11) In October 2010, the NOSB passed a recommendation on the use of drugs for pain relief.⁴ The NOSB recommended changing the health care practice standards to allow the administration of drugs in the absence of illness to prevent disease or alleviate pain. The NOSB stated that such a change would improve the welfare of organic livestock.

(12) In December 2011, the NOSB passed an additional animal welfare recommendation.⁵ The 2011 recommendation added definitions for terms related to livestock production and provisions for health care standard and living conditions. The NOSB also revised its prior recommendation on physical alterations to provide a more inclusive list of banned procedures. In the mammalian living conditions section, the NOSB recommended that outdoor access for swine include a minimum of 25 percent vegetative cover at all times. For avian species, the NOSB recommended specific indoor and outdoor space requirements, *e.g.*, stocking densities, among other provisions for living conditions specific to poultry. For layers, the NOSB

recommended a minimum of 2.0 ft² per bird indoors and outdoors.

(13) In December 2011, the NOSB passed a separate recommendation to add standards for transportation of livestock to slaughter facilities and the slaughter process.⁶ The NOSB's recommendation for transport included provisions for veal calves and the trailers/trucks used to transport animals to ensure continuous organic management. The NOSB recommended that slaughter facilities must meet certain performance-based standards assessed via observations of animal handling and any slips, falls or vocalizations before and during slaughter.

C. AMS Policy

On October 29, 2002, AMS issued a memorandum to clarify outdoor access and temporary confinement requirements for livestock under the USDA organic regulations.⁷ The memorandum stated that producers are required to balance accommodations for an animal's health and natural behavior with measures to ensure an animal's safety and well-being. The memorandum further explained that the USDA organic regulations do not specify an outdoor space allowance or stocking rate, nor do they require that all animals in the herd or flock have access to the outdoors at the same time. This memorandum explained how producers could provide evidence of compliance to support temporary confinement. This memorandum was incorporated into the NOP Handbook on January 31, 2011, and is retained as current policy.

On February 17, 2010, AMS published a final rule on Access to Pasture (Livestock). The final rule was in response to the 2005 NOSB recommendation and extensive public input requesting clear outdoor access requirements for ruminant livestock. The final rule established that ruminants obtain at least 30 percent dry matter intake from grazing during the grazing season. The rule provided clarity to correct inconsistent application and enforcement of the outdoor access provisions for ruminant livestock.

In March 2010, the USDA Office of the Inspector General (OIG) issued a

report concerning, in part, AMS guidance on outdoor access for organic livestock.⁸ The OIG found inconsistent certification practices regarding outdoor access for poultry. The OIG recommended that AMS issue guidance on outdoor access for livestock and poultry.

On October 13, 2010, AMS published draft guidance, Outdoor Access for Organic Poultry, for public comment.⁹ The draft guidance advised certifying agents to use the 2002 and 2009 NOSB recommendations as the basis for certification decisions regarding outdoor access for poultry.¹⁰ The draft guidance informed certifying agents and producers that maintaining poultry on soil or outdoor runs would demonstrate compliance with the outdoor access requirement in § 205.239.

AMS received 69 comments on the draft guidance. Comments varied widely. Some supported more specific and stringent stocking densities and soil-based outdoor access, citing animal health and environmental benefits. Other comments favored maintaining an allowance for porches as acceptable outdoor access, citing biosecurity and animal health concerns.

Commenters stated that the draft guidance was unenforceable and would not ensure year-round outside access for poultry. These commenters suggested a minimum stocking rate of 1.75 square feet per bird in henhouses that also provide access to perches, with an additional 5 square feet per bird available in vegetated outdoor runs, which should be accessible to all birds at the same time. A number of commenters, including poultry producers, supported outdoor access on soil, pasture or other vegetation, and described health benefits and protection of the environment that a pasture or other vegetated outdoor access area would afford.

One trade association, some organic egg producers, and consultants described the use of production systems that limit outdoor access via the use of enclosed porches so that poultry are not in contact with soil or pasture. These commenters described the benefits of these systems: Protection from predation, pathogens that cause food safety problems, exposure to parasites,

³NOSB, 2009. Formal Recommendation by the NOSB to the NOP, Animal Welfare. Available at: <http://www.ams.usda.gov/rules-regulations/organic/nosb/recommendations>.

⁴NOSB, 2010. Formal Recommendation by the NOSB to the NOP, Clarification of 205.238(c)(2). Available at: <http://www.ams.usda.gov/rules-regulations/organic/nosb/recommendations>.

⁵NOSB, 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>.

⁶NOSB, 2011. Formal Recommendation by the NOSB to the NOP, Animal Handling and Transport to Slaughter. Available at: <http://www.ams.usda.gov/rules-regulations/organic/nosb/recommendations>.

⁷National Organic Program, 2002. Access to the Outdoors for Livestock. Retained as Policy Memo 11-5. Available in the NOP Handbook: <http://www.ams.usda.gov/rules-regulations/organic/handbook>.

⁸USDA, Office of the Inspector General. March 2010. Audit Report 01601-03-Hy, Oversight of the National Organic Program. Available at: <http://www.usda.gov/oig/rptsauditsams.htm>.

⁹On October 13, 2010, AMS also published a Notice of Availability of Draft Guidance and Request for Comments in the **Federal Register** (75 FR 62693).

¹⁰The 2002 and 2009 NOSB recommendations included daily outdoor access from an early age and access to direct sunlight, open air and soil.

and contact with wild birds that could carry diseases. The commenters asserted that these systems are consistent with the 2002 NOSB recommendation. They noted that organic egg producers have made substantial investments in facilities with porches. Some also expressed concerns that placing birds on soil would affect their ability to comply with the Food and Drug Administration’s salmonella prevention food safety regulations (21 CFR part 118). Several producers expressed concern with the 2009 NOSB recommendation that pullets be given outdoor access at 6 weeks of age, because pullets are not fully immunized (including for protection against salmonella) until 16 weeks of age, and should not be exposed to uncontrolled environments until that time.

Given the comments and the request for rulemaking, AMS determined to pursue rulemaking to clarify outdoor access for poultry and did not finalize the draft guidance. Because the current regulations permit a range of practices for providing outdoor access for livestock, AMS could not enforce a narrower interpretation through guidance or additional training for

certifying agents. Instructing certifiers to compel compliance with requirements that are more specific than the regulations could only be resolved through rulemaking.

D. Related Issues

Some organic poultry operations provide outdoor access through porches. These porch systems proliferated after a 2002 AMS administrative appeal decision ordering the certification of an operation that provided porches exclusively for outdoor access. If finalized, this rule would supersede the 2002 appeal decision.

On July 15, 2002, an operation applied for organic certification of its egg laying operation with a USDA accredited certifying agent. As part of the application, the operation’s Organic System Plan (OSP) stated that outdoor access would be provided through covered and screened porches. The certifying agent denied certification for failure to provide hens with access to the outdoors. The certifying agent stated that a porch did not provide outdoor access as required by the USDA organic regulations. The operation appealed the Denial of Certification to the AMS

Administrator on October 22, 2002. The Administrator determined that poultry porches could be allowed because the regulations do not specify outdoor space requirements. The appeal was sustained on October 25, 2002, and the certifying agent was directed to grant organic certification to the operation retroactively to October 21, 2002.

The certifying agent objected to the Administrator’s decision and appealed to the USDA Office of the Administrative Law Judge (ALJ). On November 4, 2003, the USDA ALJ dismissed the appeal. On December 11, 2003, the certifying agent appealed to the USDA Judicial Officer. On April 21, 2004, the USDA Judicial Officer dismissed the appeal. On September 27, 2005, the certifying agent filed an appeal with the U.S. District Court, District of Massachusetts. On March 30, 2007, the U.S. District Court dismissed the case for lack of standing (*Massachusetts Independent Certification, Inc v. Johanns*. 486 F.Supp.2d 105).

III. Overview of Proposed Amendments

A. Definitions in § 205.2

Section title	Current wording	Type of action	Proposed action
205.2	Terms Defined.		
205.2	N/A	New term	Beak trimming. The removal of the curved tip of the beak.
205.2	N/A	New term	Caponization. Castration of chickens, turkeys, pheasants and other avian species.
205.2	N/A	New term	Cattle wattling. The surgical separation of two layers of the skin from the connective tissue along a 2 to 4 inch path on the dewlap, neck or shoulders used for ownership identification.
205.2	N/A	New term	De-beaking. The removal of more than the beak tip.
205.2	N/A	New term	De-snooding. The removal of the turkey snood (a fleshy protuberance on the forehead of male turkeys).
205.2	N/A	New term	Dubbing. The removal of poultry combs and wattles.
205.2	N/A	New term	Indoors. The flat space or platform area which is under a solid roof. On each level the animals have access to food and water and can be confined if necessary. Indoor space for avian species includes, but is not limited to: Pasture housing. A mobile structure for avian species with 70 percent perforated flooring. Aviary housing. A fixed structure for avian species which has multiple tiers/levels with feed and water on each level. Slatted/mesh floor housing. A fixed structure for avian species which has both: (1) A slatted floor where perches, feed and water are provided over a pit or belt for manure collection; and (2) litter covering the remaining solid floor. Floor litter housing. A fixed structure for avian species which has absorbent litter covering the entire floor.
205.2	N/A	New term	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.
205.2	N/A	New term	Outdoors. Any area in the open air with at least 50 percent soil, outside a building or shelter where there are no solid walls or solid roof attached to the indoor living space structure. Fencing or netting that does not block sunlight or rain may be used as necessary.
205.2	N/A	New term	Perch. A rod or branch type structure that serves as a roost and allows birds to utilize vertical space in the house.
205.2	N/A	New Term	Pullet. A female chicken or other avian species being raised for egg production that has not yet started to lay eggs.
205.2	N/A	New term	Roost. A flat structure over a manure pit that allows birds to grip with their toes as they would on a perch.
205.2	N/A	New term	Soil. The outermost layer of the earth comprised of minerals, water, air, organic matter, fungi and bacteria in which plants may grow roots.
205.2	N/A	New term	Stocking density. The weight of animals on a given unit of land at any one time.

Section title	Current wording	Type of action	Proposed action
205.2	N/A	New term	Toe clipping. The removal of the nail and distal joint of the back two toes of a male bird.

AMS is proposing to add fifteen new terms to § 205.2: Beak trimming, caponization, cattle wattling, de-beaking, de-snooding, dubbing, indoors, mulesing, outdoors, perch, pullet, roost, soil, stocking density and toe clipping.

AMS is proposing to prohibit several physical alterations on organic livestock. AMS is proposing to define eight terms, below, related to these physical alterations 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.

Beak trimming would be defined as the removal of the curved tip of the beak.

Caponization would be defined as the castration of chickens, turkeys, pheasants and other avian species.

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

De-beaking would be defined as the removal of more than the beak tip.

De-snooding would be defined as the removal of the turkey snood (a fleshy protuberance on the forehead of male turkeys).

Dubbing would be defined as the removal of poultry combs and wattles.

Mulesing would be defined as 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.

Toe clipping would be defined as the removal of the nail and distal joint of the back two toes of a male bird.

AMS is proposing to define “outdoors” to add more specificity to the existing requirement in the livestock living conditions section (7 CFR 205.239(a)(1)) that livestock have access to the outdoors. “Outdoors” would be defined as any area in the open air with at least 50 percent soil, outside a building or shelter where there are no solid walls or solid roof attached to the indoor living space structure. Fencing or netting that does not block sunlight or rain may be used as necessary.

Consistent with the NOSB recommendation, this definition would exclude porches and other structures attached to the indoor living space as outdoor areas. For biosafety and animal

welfare purposes, fencing or overhead netting that does not block sunlight or rain would be permitted to prevent predators and other wild birds from entering the outdoor area.

Structures for shade are permitted in the outdoor space. The area within a standalone, roofed, shade structure could be included as outdoor space area, provided it is not attached to the indoor space structure. Roofed areas attached to the building are not considered outdoor areas. This is consistent with the 2011 NOSB recommendation that stated that covered porches should not be considered outdoor access. This is also consistent with FDA’s draft guidance on outdoor access under the FDA Prevention of Salmonella Enteritidis in Shell Eggs regulations¹¹ which states that covered porches are part of the poultry house. Many producers use portable or permanent shade structures throughout their pastures. The area under these shade structures, as long as it is not attached to the structure used for indoor access, could be an allowed area under the outdoor access space requirement. The area under the eaves or under structures attached to the indoor space structure is not to be calculated as outdoor space area to ensure that porches and similar structures are not construed as outdoor space.

The proposed definition of “outdoors” would specify that outdoor areas for all livestock have access to the soil. This supports natural behaviors across species. For example, soil-based outdoor access will encourage rooting and wallowing among swine and dust bathing and foraging among poultry.

AMS is proposing to define “soil” as the outermost layer of the earth comprised of minerals, water, air, organic matter, fungi, and bacteria, in which plants may grow roots. Livestock producers must include contact with soil when providing outdoor access to livestock in a manner that maintains and improves natural resources.

¹¹ 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) <http://www.fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/eggs/ucm360028.htm>.

AMS is proposing to define “stocking density” as the maximum weight of animals on a given unit of land at any one time. Specifically, the minimum outdoor space requirements for poultry are based on stocking density as measured by the maximum pounds of bird on a square foot of land at a given time. AMS also considered basing the stocking density requirements on the minimum area per bird (*i.e.*, square feet per animal). AMS proposes to measure stocking density using weight to compensate for different-sized avian species (chickens, turkeys) and varieties (*e.g.*, different breeds of layers). Stocking density would be calculated on the given size of the outdoor land to which the birds are provided access. As an example, if one acre of land is divided into two half acre parcels and the birds are rotated between the two parcels, then the stocking density would be calculated using the one-half acre to which the birds have access.

AMS is proposing to define “indoors” as the flat space or platform area under a solid roof where the animals have access to both food and water and can be confined if necessary. Indoor space would be calculated by adding the square footage of the following roofed areas: (1) Ground level, which may have perches embedded or placed on the ground; (2) multi-level platforms, which provide water and feed on each elevation from which the birds can freely access the outdoors; (3) porches, which are accessible to the birds at all times. Space in porches may not be included in the calculation for indoor space if the doors are closed due to inclement weather or threat of diseases.

AMS is further clarifying the indoor living space requirements by defining several elements that will need to be included in that area. This proposal would define a “perch” as a rod- or branch-type structure that serves as a roost and allows birds to utilize vertical space in the house. This proposal would define a “roost” as a flat structure over a manure pit that allows birds to grip with their toes as they would on a perch.

AMS is proposing to define “pullet” as a female chicken or other avian species being raised for egg production that has not yet started to lay eggs. While pullet is sometimes used to describe young broilers which are used for meat production, AMS is using the

term pullet to describe females of avian species which are being raised to produce eggs in the future but have not yet reached sexual maturity and have not begun producing eggs. Once avian

females begin laying eggs, AMS refers to them as layers. AMS modified the definition of pullet, which is used by the AMS Livestock, Poultry and Seed

Program, to include species other than chickens.

B. Livestock Health Care Practice Standard

Section title	Current wording	Proposed action	Proposed wording
205.238	Livestock Health Care Practice Standard	No Change.	
205.238(a)	(a) The producer must establish and maintain preventive livestock health care practices, including:	No change.	
205.238(a)(1)	(1) Selection of species and types of livestock with regard to suitability for site-specific conditions and resistance to prevalent diseases and parasites;	No change.	
205.238(a)(2)	(2) Provision of a feed ration sufficient to meet nutritional requirements, including vitamins, minerals, protein and/or amino acids, fatty acids, energy sources, and fiber (ruminants);	Revision	(2) Provision of a feed ration sufficient to meet nutritional requirements, including vitamins, minerals, protein and/or amino acids, fatty acids, energy sources, and fiber (ruminants), resulting in appropriate body condition.
205.238(a)(3)	(3) Establishment of appropriate housing, pasture conditions, and sanitation practices to minimize the occurrence and spread of diseases and parasites;	No change.	
205.238(a)(4)	(4) Provision of conditions which allow for exercise, freedom of movement, and reduction of stress appropriate to the species;	No change.	
205.238(a)(5)	(5) Performance of physical alterations as needed to promote the animal's welfare and in a manner that minimizes pain and stress; and	Revision	(5) Physical alterations may be performed to benefit the welfare or hygiene of the animals, or 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.
205.238(a)(5)(i)		New	(i) The following practices may not be routinely used and must be used only with documentation that alternatives methods to prevent harm failed: needle teeth trimming (no more than top 1/3rd of the tooth) in pigs and tail docking in pigs.
205.238(a)(5)(ii)		New	(ii) The following practices must not be performed on a certified operation: de-beaking, de-snooding, caponization, dubbing, toe trimming of chickens, toe trimming of turkeys unless with infrared at hatchery, beak trimming after 10 days of age, tail docking of cattle, wattle of cattle, face branding of cattle, tail docking of sheep shorter than the distal end of the caudal fold, and mulesing of sheep.
205.238(a)(6)	(6) Administration of vaccines and other veterinary biologics.	No change.	
205.238(a)(7)		New	(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.
205.238(a)(8)		New	(8) Monitoring of lameness and keeping records of the percent of the herd or flock suffering from lameness and the causes.

Section title	Current wording	Proposed action	Proposed wording
205.238(a)(9) .....	.....	New	(9) Ammonia levels in poultry houses must be less than 25 parts per million indoors. When ammonia levels in poultry houses exceed 10 parts per million, an operation must implement additional practices to reduce the ammonia levels below 10 parts per million.
205.238(b)	(b) When preventive practices and veterinary biologics are inadequate to prevent sickness, a producer may administer synthetic medications: Provided, that, such medications are allowed under §205.603. Parasiticides allowed under §205.603 may be used on:	No change.	
205.238(b)(1)	(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	No change.	
205.238(b)(2)	(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	No change.	
205.238(b)(3) .....	.....	New	(3) Synthetic medications may be administered in the presence of illness or to alleviate pain and suffering: Provided, that such medications are allowed under §205.603.
205.238(c)	(c) The producer of an organic livestock operation must not:	No change.	
205.238(c)(1)	(1) Sell, label, or represent as organic any animal or edible 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.	Revision	(1) Sell, label, or represent as organic any animal or edible 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 having withholding time, cannot be sold as organic but may be fed to their own offspring. Milk from animals undergoing treatment with prohibited substances cannot be sold as organic or fed to organic livestock.
205.238(c)(2)	(2) Administer any animal drug, other than vaccinations, in the absence of illness;	Revision	(2) Administer any animal drug in the absence of illness or to alleviate pain or suffering, with the exception of vaccinations and other veterinary biologics.
205.238(c)(3)	(3) Administer hormones for growth promotion;	Revision	(3) Administer hormones for growth promotion, production or reproduction.
205.238(c)(4)	(4) Administer synthetic parasiticides on a routine basis;	No change.	
205.238(c)(5)	(5) Administer synthetic parasiticides to slaughter stock;	No change.	
205.238(c)(6)	(6) Administer animal drugs in violation of the Federal Food, Drug, and Cosmetic Act; or	No change.	
205.238(c)(7)	(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 shall not be sold, labeled, or represented as organically produced.	No change.	

Section title	Current wording	Proposed action	Proposed wording
205.238(c)(8)	New	(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.
205.238(c)(9)	New	(9) Neglect to identify and record treatment of sick and injured animals in animal health records.
205.238(c)(10)	New	(10) Practice forced molting or withdrawal of feed to induce molting.
205.238(d)	New	(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.
205.238(e)	New	(e) Euthanasia.
205.238(e)(1)	New	(1) Organic livestock producers must have written plans for prompt, humane euthanasia for sick or injured livestock.
205.238(e)(2)	New	(2) The following methods of euthanasia are not permitted: suffocation; blow to the head by blunt instrument; and the use of equipment that crushes the neck, including killing pliers or burdizzo clamps.
205.238(e)(3)	New	(3) Following a euthanasia procedure, livestock must be carefully examined to ensure that they are dead.

AMS is proposing to amend current provisions in and add new provisions to the health care practice standards. The proposed amendment to § 205.238(a)(2) would specify that the sufficiency of the feed ration would be demonstrated by appropriate body condition of the livestock. Livestock producers would need to monitor their animals to ensure body condition is being maintained. In addition, certifying agents would 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. A suitable condition for dairy cattle may be considered too thin in beef cattle. Producers who routinely monitor body condition of their livestock will be more likely to discover a health or feed issue early, before the animal suffers. AMS plans to provide further information about body condition assessment through published guidance to assist certifiers, inspectors, and producers assess body condition in different species.

AMS proposes to revise § 205.238(a)(5) to clarify the conditions under which physical alterations may be performed on livestock. Physical alterations may be performed for only

certain reasons, including an animal's welfare, hygiene, identification, or safety. Alterations must be done at a reasonably young age with minimal pain or stress to the animal, and only by a person who is competent to perform the procedure. Competency may be demonstrated by training or experience of the person performing the alterations or may be demonstrated by the training or experience of the person training the person performing the alterations.

AMS is proposing to add a new § 205.238(a)(5)(i) to list the physical alterations that are not allowed on a routine basis, but may be performed on an as-needed basis. Needle teeth trimming and tail docking in pigs may only be performed in response to documented animal welfare reasons when alternative steps to prevent harm fail. Teeth clipping, if performed, would be limited to the top third of the 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 the sow or piglets or document tail biting on piglets in the litter. Swine producers would also need to document that alternative methods 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.

In the 2009 recommendation, the NOSB recommended that needle teeth clipping and piglet tail docking be allowed, but retracted that in its 2011 recommendation. In consideration of NOSB preferences and producer needs, AMS is proposing to restrict the use of these procedures to situations when alternative methods of preventing injury fail and the producer documents the harm to animals prior to performing either physical alteration.

AMS is proposing to add a new § 205.238(a)(5)(ii) to list the physical alterations that are prohibited in an organic operation. The following physical alterations would be prohibited under this proposal: De-beaking, de-snooding, caponization, dubbing, toe trimming of chickens, toe trimming 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.

AMS is proposing to add a new § 205.238(a)(7) which would specify that surgical procedures on livestock to

treat an illness must be done in a manner which minimizes pain, stress, and suffering. The NOSB recommended that all surgical procedures for livestock be done with the use of anesthetics, analgesics, and sedatives. AMS is proposing that all surgical procedures for treatment of disease shall 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 listed in § 205.603.

AMS is proposing to add a new § 205.238(a)(8) to require organic producers to actively monitor lameness within the herd or flock and to document the cases of lameness. 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 will enable organic livestock producers to identify and address a problem before it becomes widespread among the animals. In addition, the records will provide an auditable trail for certifying agents to verify that livestock producers are monitoring this potential cause of animal suffering.

AMS is proposing to add a new § 205.238(b)(3) to state that synthetic medications may be administered in the presence of an illness to reduce pain and suffering, as long as those medications are allowed under § 205.603. OFPA limits the use of synthetic medications in the absence of illness. AMS is proposing to follow the NOSB recommendation to allow the use of synthetic substances to alleviate pain and suffering for animals if the substances appear on the National List. AMS is proposing to take a broad view of illness to encompass not just instances of disease or injury, but also cases of inflammation due to physical alterations. By providing pain relief prior to performing a physical alteration, animal welfare is improved. In addition, by providing pain relief, the animal undergoing the physical alteration is less likely to make a sudden movement. Such movements can cause infection or a more severe injury. Again, the use of pain relief prior to the physical alteration can reduce serious complications. Physical alterations such as dehorning result in trauma to the target tissue. This trauma causes localized bleeding and inflammation, resulting in an illness state.

AMS is proposing to amend § 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 withholding time. However, milk from an organic animal or breeder stock may continue to provide milk for its own offspring during the withholding time. As an example, if an organic beef cow was nursing her organic offspring, was injured and then stitched by a veterinarian using lidocaine to minimize pain and stress, her calf could continue to nurse the dam even during the 7-day withholding period for lidocaine (§ 205.603(b)(4)), without loss of the calf's organic status. This means that the calf would still be eligible to be organic slaughter stock. This is consistent with the April 2010 NOSB recommendation that a calf nursing a dam treated topically with lidocaine, or other approved synthetic with a withdrawal time would not lose organic status.

AMS is proposing to revise § 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 Center for Veterinary Biologics (CVB) regulates vaccines and all other veterinary biologics. While vaccines are commonly used to describe many of these products, CVB has additional categories such as bacterins and toxoids. In addition, this change reflects the definition for biologicals in § 205.2. This supports § 205.238(a)(6), which identifies the use of vaccines and other veterinary biologics as a required practice to improve animal health. This section again asserts that pain relief may be administered in the absence of illness prior to physical alterations.

AMS is proposing to amend § 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. Hormones listed in § 205.603 (e.g., oxytocin) may continue to be used to treat illnesses. Stakeholders have noted that the USDA organic regulations are silent on the use of hormones to stimulate production or for reproductive purposes. This addition would clarify that all hormones, unless used to treat an illness, are prohibited in organic production.

AMS is proposing to add a new provision in § 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 which appears on

the National List. However, if no appropriate medication is allowed for organic production, organic livestock producers would be required to administer treatments, even if the animals would lose their organic status. Furthermore, euthanasia could be an acceptable practice for minimizing pain and suffering.

AMS is proposing to add new § 205.238(c)(9) to require livestock producers to identify and record treatment of sick and injured animals in animal health records. These records can enable producers and certifying agents to quickly identify a particular disease or ailment in an animal. Early identification can lead to more effective prevention or treatment, which will enhance the overall health of the livestock on that farm.

AMS is proposing to add a new provision in § 205.238(c)(10) to explicitly prohibit the practice of forced molting or withdrawal of feed to induce molting in poultry. Forced molting, in which feed is severely restricted for a period of time in order to rejuvenate egg production, is prohibited under § 205.238(a)(2), which requires a nutritionally sufficient feed ration. However, forced molting was never explicitly prohibited under the USDA organic regulations. This change is consistent with the NOSB recommendation and a number of other third-party animal welfare certification programs.

AMS is proposing to add a new § 205.238(e) to address euthanasia. In certain cases, livestock may be suffering from an illness from which recovery is unlikely. For these situations, organic livestock producers must maintain written plans for euthanizing sick or injured livestock (§ 205.238(e)(1)). In new § 205.238(e)(2), AMS is proposing to prohibit certain methods of euthanasia, including: Suffocation, blow(s) to the head by blunt instrument, and use of equipment that crushes the neck, (e.g., killing pliers or burdizo clamps). In the event of an emergency situation where a local, state or federal government agency requires the use of non-organically approved method of euthanasia, organic livestock operations will not lose organic certification or face other penalties for the use of non-organically approved methods of euthanasia.

AMS is further proposing, in § 205.238(e)(3), that after the euthanasia procedure, producers must carefully examine the body to ensure death. The NOSB recommended listing the allowable methods of euthanasia. However, given that new humane euthanasia methods may emerge, AMS

would not intend to discourage producer adoption of these techniques. Therefore, AMS is proposing to allow organic livestock producers to use any

method of euthanasia, except for those prohibited in § 205.238(e)(2). The list of prohibited methods could be amended

to include other techniques, if needed, through future rulemaking.

C. Mammalian Living Conditions

205.239	Livestock Living Conditions	Revision	Mammalian Livestock Living Conditions.
205.239(a)	(a) The producer of an organic livestock operation must establish and maintain year-round livestock living conditions which accommodate the health and natural behavior of animals, including:	No change.	
205.239(a)(1)	(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 §§ 205.239(b) and (c). 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 simultaneously without crowding and 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.	Revision	(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 §§ 205.239(b) and (c). 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 in a manner that maintains all animals in a good body condition. Continuous total confinement of any animal indoors is prohibited. Continuous total confinement of ruminants in yards, feeding pads, and feedlots is prohibited.
205.239(a)(2)	(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.	No change.	
205.239(a)(3)	(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.	Revision	(3) Animals must be kept clean during all stages of life with the use of appropriate, clean, dry bedding, as appropriate for the species. When roughages are used as bedding, they must be organically produced and handled 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.
205.239(a)(4)	(4) Shelter designed to allow for:	No change.	
205.239(a)(4)(i)	(i) Natural maintenance, comfort behaviors, and opportunity to exercise;	Revision	(i) Sufficient space and freedom to lie down in full lateral recumbence, turn around, stand up, fully stretch their limbs without touching other animals or the sides of the enclosure, and express normal patterns of behavior;
205.239(a)(4)(ii)	(ii) Temperature level, ventilation, and air circulation suitable to the species;	No change.	
205.239(a)(4)(iii)	(iii) Reduction of potential for livestock injury	No change.	
205.239(a)(4)(iv) .....	.....	New	(iv) Areas for bedding and resting that are sufficiently large, solidly built, and comfortable so that animals are kept clean, dry, and free of lesions.
205.239(a)(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.	No change.	
205.239(a)(6) .....	.....	New	(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.
205.239(a)(7) .....	.....	New	(7) Dairy young stock may be housed in individual pens under the following conditions:

205.239(a)(7)(i) .....	.....	New	(i) Until weaning, providing 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.
205.239(a)(7)(ii) .....	.....	New	(ii) Dairy young stock shall be group-housed after weaning.
205.239(a)(7)(iii) .....	.....	New	(iii) Dairy young stock over six months of age shall have access to the outdoors at all times, including access to pasture during the grazing season, except as allowed under 205.239(c).
205.239(a)(8) .....	.....	New	(8) Swine must be housed in a group, except:
205.239(a)(8)(i) .....	.....	New	(i) Sows may be housed individually at farrowing and during the suckling period;
205.239(a)(8)(ii) .....	.....	New	(ii) Boars.
205.239(a)(8)(iii) .....	.....	New	(iii) Swine with documented instances of aggression or recovery from an illness.
205.239(a)(9) .....	.....	New	(10) Piglets shall not be kept on flat decks or in piglet cages.
205.239(a)(10) .....	.....	New	(11) Exercise areas for swine, whether indoors or outdoors, must permit rooting, including during temporary confinement events.
205.239(a)(11) .....	.....	New	(12) In confined housing with stalls, at least one stall must be provided for each animal in the facility at any given time. 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.
205.239(a)(12) .....	.....	New	(13) At least 50 percent of outdoor access space must be soil, except for temporary conditions which would threaten the soil or water quality when outdoor access must be provided without contact to the soil.
205.239(b)	(b) The producer of an organic livestock operation may provide temporary confinement or shelter for an animal because of:	No change.	
205.239(b)(1)	(1) Inclement weather;	No change.	
205.239(b)(2)	(2) The animal's stage of life: Except, that lactation is not a stage of life that would exempt ruminants from any of the mandates set forth in this regulation.	No change.	
205.239(b)(3)	(3) Conditions under which the health, safety, or well-being of the animal could be jeopardized	No change.	
205.239(b)(4)	(4) Risk to soil or water quality;	No change.	
205.239(b)(5)	(5) Preventive healthcare procedures or for the treatment of illness or injury (neither the various life stages nor lactation is an illness or injury);	No change.	
205.239(b)(6)	(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;	No change.	
205.239(b)(7)	(7) Breeding: Except, that, bred animals shall not be denied access to the outdoors and, once bred, ruminants shall not be denied access to pasture during the grazing season;	Revision	(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
205.239(b)(8)	(8) 4-H, Future Farmers of America 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.	Revision	(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 §205.239 (b)(6), 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.

205.239(c)	(c) The producer of an organic livestock operation may, in addition to the times permitted under § 205.239(b), temporarily deny a ruminant animal pasture or outdoor access under the following conditions:	No change.	
205.239(c)(1)	(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;	No change.	
205.239(c)(2)	(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: Provided, 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;	No change.	
205.239(c)(3)	(3) In the case of fiber bearing animals, for short periods for shearing; and	No change.	
205.239(c)(4)	(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.	No change.	
205.239(d)	(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: Except, that, 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 simultaneously 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.	Revision	(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: Except, that, 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 feedlot to feed 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.
205.239(e)	(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.	No change.	

AMS is proposing to separate mammalian living conditions from avian living conditions, due to the different physiology and husbandry practices for birds and mammals. Under this proposal, AMS would revise the title of § 205.239 from “Livestock living conditions” to “Mammalian Livestock Living Conditions”. Avian living conditions would be addressed in new § 205.241. By creating clear requirements for mammalian livestock and avian livestock, animal health and wellbeing can be enhanced and consumers can be assured of the integrity of the USDA organic seal.

AMS is proposing to revise § 205.239(a)(1) to require that food is

provided in a manner that maintains all animals in good body condition while removing the requirement that all ruminant livestock must be able to feed simultaneously. This would support animal welfare by ensuring that feed rations are available to all animals so that they maintain good body condition. 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 provides organic ruminant producers with more flexibility and

options to manage their farm and livestock in farm-specific methods.

AMS is proposing to revise § 205.239(a)(3) to clarify that livestock producers must keep animals clean during all stages of life with the use of appropriate, clean, dry bedding. Ensuring animals are clean is a disease prevention practice. Clean animals are less likely to develop lesions, transmit diseases, or become cold due to matted hair coats. The requirement for clean animals is relative to the species. Swine would be allowed to exhibit natural behavior and wallow in mud, and ruminants grazing on lush spring grass would be expected to have some

manure on their hind quarters due to the natural behavior of grazing.

AMS is proposing to revise § 205.239(a)(4)(i) to specify that shelter must be designed to accommodate natural behaviors. Shelter must have sufficient space for the animals to lie down, stand up, and fully stretch their limbs without touching other animals or the sides of the shelter. Shelter must be designed to allow livestock to express their normal patterns of behavior.

AMS is proposing to add § 205.239(a)(4)(iv) to require a sheltered area for bedding and resting, which is sufficiently large and comfortable to keep the animals clean, dry, and free of lesions. This supports the proposed revision in § 205.239(a)(3), which would require producers to keep livestock clean. Not all shelters would need to be designed to hold bedding. As an example, a shelter designed to provide shade may be portable, and thus incompatible with holding bedding.

AMS is proposing to add new requirements in § 205.239(a)(7) concerning the individual housing of dairy young stock. Section 205.239(a)(7)(i) would allow for the individual housing of animals until weaning, as long as the animals had 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 would need to be designed so that animals could see, smell, and hear other animals. Furthermore, new § 205.239(a)(7)(ii) would require that dairy young stock are group-housed after weaning, and new § 205.239(a)(7)(iii) would require that animals over six months of age must have access to the outdoors at all times, including access to pasture during the grazing season, except as allowed under § 205.239 (b) and (c). Weaning is the time at which the young are taken off of milk or milk replacers.

AMS is proposing to add three new provisions in § 205.239(a)(8) to require the group housing of swine, with several listed exceptions. Section 205.239(a)(8)(i) would allow for sows to be individually housed at farrowing and during the suckling period. Section 205.239(a)(8)(ii) would allow for boars to be individually housed to reduce the likelihood of fights and injuries. Section 205.239(a)(8)(iii) would allow for swine to be individually housed after documented multiple instances of

aggression or to allow an individual pig to recover from a documented illness.

AMS is proposing to add two new provisions in § 205.239(a)(9) and (10) concerning swine housing. Section 205.239(a)(9) would prohibit the use of flat decks or piglet cages. This provision would prohibit the stacking of piglets in flat decks in multiple layers. In addition, § 205.239(a)(10) would require that both indoor and outdoor areas for swine would have some space which would permit rooting. Rooting is a natural behavior which 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 events.

AMS is proposing to add a new provision in § 205.239(a)(11) to further define barns or other structures with stalls. If indoor shelter is provided by a structure with stalls, then one stall must be provided for each animal at any given time. This allows for all animals to rest or lie down at the same time and provides a space for less dominant animals to escape from aggressive animals. In no case may a cage be considered a stall. One exception is provided for this provision. In group-housed swine, more animals than feeding stalls may be allowed, as long as all animals are able to consume sufficient quantities of feed to maintain good body condition. 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 enter the stall for its specific quantity of feed. AMS did not intend to prohibit such systems, which enhance the health and wellbeing of organic animals.

AMS is proposing to add a new requirement for outdoor access in § 205.239(a)(12). Organic livestock are required to have unencumbered access to the outdoors at all times, unless temporary confinement is justified under a specific reason described in the regulations (*e.g.*, nighttime confinement for protection from predators). As part of the definition of the outdoors, livestock must have access to the soil in a manner that maintains or improves the natural resources of the farm, and does not degrade soil or water quality. To make access to soil meaningful, at least

50 percent of all the outdoor access area must be comprised of soil. This will benefit mammals, as surfaces such as concrete may lead to more joint problems and resulting lameness. Soil also provides an opportunity for swine to root and engage in other natural behaviors.

AMS is proposing to revise § 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 that a natural or artificial breeding procedure requires. A group of livestock may be confined while the various individuals are bred, then the group would be returned to living spaces that allow outdoor access. Livestock may not be confined indoors to observe estrus. 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 is proposing to revise § 205.239(b)(8) to clarify the temporary confinement exception for youth livestock projects. 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. This 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 which 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. Otherwise, non-certified sales facilities, such as auction barns or fair grounds, may not sell or represent livestock as organic. AMS is proposing to provide this exception to encourage the next generation of organic farmers.

AMS is proposing to revise § 205.239(d) to reflect the similar proposed changes in § 205.239(a)(1). AMS would remove the phrase requiring that all ruminants be able to feed simultaneously. This 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.

D. Avian Living Conditions

205.241	New	Avian Living Conditions.
205.241(a)	New	(a) The producer of an organic poultry operation must establish and maintain year-round poultry living conditions which 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 from predators and 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 § 205.241(d).
205.241(b)	New	Indoor space requirements.
205.241(b)(1)	New	(1) All birds must be able to move freely, and engage in natural behaviors.
205.241(b)(2)	New	(2) Ventilation must be adequate to prevent buildup of ammonia. Ammonia levels must not exceed 25 ppm. Producers must monitor ammonia levels on a monthly basis. When ammonia levels exceed 10 ppm, producers must implement additional practices to reduce ammonia levels below 10 ppm.
205.241(b)(3)	New	(3) For layers and mature birds, artificial light may be used to prolong the day length up to 16 hours. 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.
205.241(b)(4)	New	(4) The following types of flooring may be used in shelter provided for avian species:
205.241(b)(4)(i)	New	(i) Mesh or slatted flooring under drinking areas to provide drainage;
205.241(b)(4)(ii)	New	(ii) Houses, excluding pasture housing, 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.
205.241(b)(4)(iii)	New	(iii) Litter must be provided and maintained in a dry condition.
205.241(b)(5)	New	(5) Poultry houses must have sufficient exit areas, appropriately distributed around the building, to ensure that all birds have ready access to the outdoors.
205.241(b)(6)	New	(6) Flat roosts areas must allow birds to grip with their feet. Six inches of perch space must be provided per bird. Perch space may include the alighting rail in front of the nest boxes. All birds must be able to perch at the same time except for multi-tiered facilities, in which 55 percent of birds must be able to perch at the same time. Facilities for species which do not perch do not need to be contain perch and roost space.
205.241(b)(7)	New	(7) For layers, no more than 2.25 pounds of hen per square foot of indoor space is allowed at any time, except;
205.241(b)(7)(i)	New	Pasture housing: no more than 4.5 pounds of hen per square foot of indoor space;
205.241(b)(7)(ii)	New	Aviary housing: no more than 4.5 pounds of hen per square foot of indoor space;
205.241(b)(7)(iii)	New	Slatted/mesh floor housing: no more than 3.75 pounds of hen per square foot of indoor space; and
205.241(b)(7)(iv)	New	Floor litter housing: no more than 3.0 pounds of hen per square foot of indoor space.
205.241(b)(8)	New	(8) For pullets, no more than 3.0 pounds of pullet per square foot of indoor space may be allowed at any time.
205.241(b)(9)	New	(9) For turkeys, broilers, and other meat type species, no more than 5.0 pounds of birds per square foot of indoor space is allowed at any time.
205.241(b)(10)	New	(10) All birds must have access to scratch areas in the house.
205.241(b)(11)	New	(11) Poultry housing must be sufficiently spacious to allow all birds to move freely, stretch their wings, stand normally, and engage in natural behaviors.
205.241(c)	New	Outdoor Space Requirements.
205.241(c)(1)	New	(1) 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 (train) birds to go outdoors. Outdoor areas must have suitable enrichment to entice birds to go outside. Birds may be temporarily denied access to the outdoors in accordance with § 205.241(d).
205.241(c)(2)	New	(2) Exit areas for birds to get outside must be designed so that more than one bird at a time can get through the opening and that all birds within the house can go through the exit areas within one hour.
205.241(c)(3)	New	(3) For layers, no more than 2.25 pounds of hen per square foot of outdoor space may be allowed at any time.
205.241(c)(4)	New	(4) For pullets, no more than 3.0 pounds of pullet per square foot may be allowed at any time.
205.241(c)(5)	New	(5) For turkeys, broilers, and other meat type species, no more than 5.0 pounds of bird per square foot may be allowed at any time.
205.241(c)(6)	New	(6) Space that has a solid roof overhead and is attached to the structure providing indoor space does not meet the definition of outdoor access and must not be included in the calculation of outdoor space.
205.241(c)(7)	New	(7) Shade may be provided by structures, trees or other objects in the environment.
205.241(c)(8)	New	(8) At least 50 percent of outdoor access space must be soil.
205.241(d)	New	(d) The producer of an organic poultry operation may temporarily confine birds. Each instance of confinement must be recorded. Producers may confine birds because of:
205.241(d)(1)	New	(1) Inclement weather, including, when air temperatures are under 40 degrees F or above 90 degrees F;
205.241(d)(2)	New	(2) The animal's stage of life, including the first 4 weeks of life for broilers and other meat type birds and the first 16 weeks of life for pullets; and
205.241(d)(3)	New	(3) Conditions under which the health, safety, or well-being of the animal could be jeopardized; however, the potential for disease outbreak is not sufficient cause. A documented occurrence of a disease in the region or relevant migratory pathway must be present in order to confine birds.
205.241(d)(4)	New	(4) Risk to soil or water quality.

205.241(d)(5)	New	(5) Preventive healthcare procedures or for the treatment of illness or injury (neither various life stages nor egg laying is an illness or injury).
205.241(d)(6)	New	(6) Sorting or shipping birds and poultry sales: Provided, the birds are maintained under continuous organic management, throughout the extent of their allowed confinement.
205.241(d)(7)	New	(7) Nest Box training: Except, that, birds shall not be confined any longer than two weeks to teach the proper behavior.
205.241(d)(8)	New	(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 birds have arrived home at the conclusion of the event. These birds 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 (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.
205.241(e)	New	(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 and optimizes recycling of nutrients and must manage outdoor access in a manner that does not put soil or water quality at risk.

In conjunction with the proposed amendments discussed above, AMS is proposing to add a new § 205.241, entitled “Avian living conditions.” AMS chose to divide in two the existing living condition section, one for mammalian and one for avian, to provide for more clarity and specificity for each. The proposed avian living conditions section would include existing provisions from the current living conditions requirements as well as requirements recommended by the NOSB. AMS made a similar decision when the pasture requirements were added specifically for ruminants and not simply appended onto the livestock feed section. The requirements in this new section would apply to all poultry species, including but not limited to, chickens, turkeys, geese, quail, pheasant, and any other species which are raised for organic eggs, organic meat, or other organic agricultural product. AMS is proposing to add § 205.241(a) to require organic poultry operations to establish and maintain living conditions that accommodate the health and natural behaviors of the birds.

In addition, a new § 205.241(a) would require organic poultry producers to provide their birds with 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 both predators and aggressive behaviors, in a manner that is suitable to the species, the stage of life, and the environment. These general principles will be further clarified in § 205.241(b) and (c). New § 205.241(d) describes exceptions to the requirement for outdoor access.

AMS is proposing to add a new § 205.241(b) to specify avian indoor space requirements. New § 205.241(b)(1) would require that indoor space allow all birds to move freely and engage in natural behaviors. This would prohibit

the use of cages or environments which limit free movement within the indoor space. In addition, the indoor space must allow birds to engage in natural behaviors such as dust bathing or escape from aggressive birds.

AMS is proposing to add a new § 205.241(b)(2) to require ventilation suitable to prevent ammonia in excessive concentrations in the indoor space. Ammonia is a natural breakdown product of manure from livestock which can be harmful for birds to inhale. Producers must describe in the Organic System Plan methods and procedures which will maintain ammonia under 10 ppm. Ammonia levels would need to be monitored monthly to verify that ammonia concentrations remain under 10 ppm and never exceed 25 ppm. Producers would need to implement additional ammonia mitigation procedures when ammonia levels exceed 10 ppm to ensure that ammonia levels never exceed 25 ppm in the indoor space. Ammonia in high concentrations is harmful for birds to inhale, and, in many cases, is a sign that the litter is too damp, which also may cause lameness in the birds.

AMS is proposing to add a new § 205.241(b)(3) to clarify the lighting requirements for organic poultry. Organic producers may use artificial light to prolong the daylight up to 16 hours. No artificial light could be used to prolong the day if natural darkness was 8 hours or less. 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 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.

AMS is proposing to add a new § 205.241(b)(4) to describe the types of flooring that may be used in all types of indoor poultry houses provided for avian species. Mesh flooring would be allowed under drinking areas to provide drainage in new § 205.241(b)(4)(i). AMS is proposing to add new § 205.241(b)(4)(ii) to allow for slatted floors as long as 30 percent of the flooring is solid with sufficient litter so that birds may dust bathe freely without crowding. Pasture housing is being exempted from this requirement, as birds on pasture will have large areas of outdoor space for dust bathing. AMS is further proposing in new § 205.241(b)(4)(iii) that the litter must be provided in all types of indoor housing and maintained in a dry manner. Wet litter can lead to a variety of problems for birds, including lameness and excess ammonia concentration. Litter may be topped off when needed to maintain sufficient dryness.

AMS is proposing to add a new § 205.241(b)(5) to describe the required openings in shelters so that the birds can easily access both the indoor and outdoor areas. Doors or openings must be distributed around the building. In addition, the openings must be large enough to allow the passage of more than one bird at a time. Wide doors spread around the building provide meaningful outdoor access to the birds.

AMS is proposing to add a new § 205.241(b)(6) to require a flat roost area which birds may grip with their feet with a minimum of 6 inches of perch space per bird. The perch space may include the alighting rail in front of nest boxes. In single story buildings, all birds must be able to perch at the same time. In multi-tiered facilities, 55 percent of the birds must be able to perch at the same time, and the 6-inch per hen requirement still applies.

Perches may be either set on the ground/platform or elevated.

AMS is proposing to add new § 205.241(b)(7), (b)(7)(i), (b)(7)(ii), (b)(7)(iii), (b)(7)(iv), (b)(8), and (b)(9) to list the required minimum avian indoor space requirements. Indoor space requirements apply with various minimums to all methods of production, including ones in which indoor space is provided with permanent buildings or mobile pasture units. Indoor space is further defined in § 205.2, including pasture housing, aviary housing, floor litter housing and slatted/mesh floor housing. In 2011, the NOSB recommended a minimum of 2.0 square feet per hen based on the outside perimeter of the indoor housing structure and in which all types of indoor housing would have the same space requirement. In preparation for this proposed rule, AMS examined a number of other animal welfare certification programs developed by scientific committees.¹² These animal welfare certification standards varied from a minimum of 1.0 square feet per bird in aviaries and pasture systems to 1.8 square feet per hen with no more than 500 hens per barn. In addition, AMS obtained comments from various producer, certifying agent, and trade

groups. Producers in colder climates stated that maintaining a warm indoor temperature during the winter is much more difficult with a 2.0 square foot minimum requirement for indoor space. Producers with aviaries cited the scientific committees' findings that aviaries provided enhanced welfare due to birds being able to utilize vertical space to engage in natural behaviors. Producers with slatted/mesh floors cited the reduced welfare concerns from lameness by keeping the litter drier. To better align with current scientific consensus, AMS is determining the space density requirements by housing type. AMS is proposing that pasture housing have a maximum of 4.5 pounds per square foot; aviary housing have a maximum of 4.5 pounds per square foot; slatted/mesh floor have a maximum of 3.75 pounds per square foot; and floor litter housing have a maximum of 3.0 pounds per square foot. As explained below, AMS is proposing to use pounds of laying hen per square foot to measure indoor space per laying hen, in order to have consistent application of this requirement for different avian species/varieties.

AMS recognizes that a wide variety of species and breeds within species may be used to produce eggs for human

consumption. Using a minimum space per animal would be problematic if a producer of quail eggs or emu eggs were to seek organic certification. The square feet of space per hen metric would not be reasonable for these and other species. Therefore, AMS is proposing to convert the minimum square feet of space per hen to the construction of maximum pounds of laying hen per square foot of space provided, similar to format of the NOSB-recommended minimum space for pullets and meat-type birds. To make this conversion, AMS determined that a majority of organic eggs are brown eggs. AMS determined that about 60 percent of all brown eggs are produced by the ISA Brown strain of chicken. Based on this, AMS made the assumption a majority of the organic brown eggs were produced by the ISA Brown strain of chicken. An average mature weight for an ISA Brown hen is 4.5 pounds. AMS made the following calculation to convert minimum square feet to maximum pounds per square foot:

$$(1 \text{ hen}/2.0 \text{ square feet}) * (4.5 \text{ pounds}/1 \text{ hen}) = 2.25 \text{ pounds per square foot}$$

Table 1 lists the square feet per laying hen for various housing types and the resulting calculation of pounds of hen per square foot allowed.

TABLE 1—INDOOR STOCKING DENSITY—UNIT CONVERSION

Indoor housing type	Square feet per laying hen	Pounds of hen per square foot
Pasture	1.0	4.5
Aviary	1.0	4.5
Floor Litter	1.5	3.0
Pit/mesh litter	1.2	3.75
All others	2.0	2.25

AMS is requesting comments regarding the above assumptions. Specifically, AMS requests comments on:

- Are most organic eggs brown?
- Are most organic laying hens from the ISA Brown strain?
- Is the mature weight of an ISA Brown hen 4.5 pounds under organic condition?
- What other avian species are used for organic egg production?

The indoor space requirement based upon maximum pounds of laying hen per square foot of space will allow producers to vary the number of birds in a given house depending upon the size of the bird or breed of the bird. For example, Rhode Island Red birds are

heavier than white leghorns or ISA Browns, and thus could not be stocked as densely (number of birds per unit area) in the same area.

AMS is proposing to use the NOSB recommendation of a maximum 3 pounds of pullet per square foot of indoor space in new § 205.241(b)(8) and a maximum of 5 pounds of meat-type species (e.g., broilers, turkeys, geese) per square foot of indoor space in § 205.241(b)(9). These are minimum standards, and organic producers may choose to provide more indoor space than required.

AMS is proposing to add new § 205.241(b)(10) and (11) to specify indoor requirements to meet certain natural behaviors. Indoor space,

whether stationary or mobile, must have scratch areas which allow all birds access. In addition, the indoor housing must be sufficiently spacious to allow all birds to move freely, stand normally, stretch their wings and engage in natural behaviors.

AMS is proposing to add a new § 205.241(c) to specify the outdoor space requirements for avian species. Section 205.241(c)(1) would require that the outdoor space be designed to promote and encourage outdoor access for all birds. Producers would be required to train birds to go outdoors from an early age. Outdoor space requirements are not meaningful unless the birds go outside. Therefore, producers must actively and repeatedly train their birds to access the

¹² AMS reviewed the following animal welfare certification programs: Certified Humane (Humane Farm Animal Care); Animal Welfare Approved;

Animal American Humane Certified (American Humane Association); 5-Step Animal Welfare

Rating Program (Global Animal Partnership); and United Egg Producers Certified.

outdoors and provide sufficient enrichment so that the birds stay outdoors. Organic producers may temporarily deny birds access to the outdoors space, in accordance with § 205.241(d).

AMS is proposing in § 205.241(c)(1), in line with the NOSB recommendation, that outdoor areas must have suitable enrichment to entice the birds to go outside. One example of suitable enrichment would be a minimum 50 percent vegetative cover (living vegetation or harvested vegetation scattered in the area). Minimum vegetative cover would provide opportunities for poultry to engage in natural foraging behaviors. In addition, the vegetative cover would help to reduce soil erosion and nutrient run off. Other means of providing enrichment include, but are not limited to: Access to water for water birds; bales of straw or hay; raised platforms; cover for protection from aerial predators; shaded areas and trees; and loose substrate for dust bathing.

AMS is proposing to add new § 205.241(c)(3) through (5) to specify minimum outdoor space requirements. Organic layer producers must not exceed 2.25 pounds of hen per square foot of outdoor space provided. Organic pullet producers must not exceed 3 pounds of pullet per square foot of outdoor space provided. Organic broiler, turkey and other meat-type producers must not exceed 5 pounds of bird per square foot of outdoors space provided. AMS chose to convert the NOSB recommended space for layers from a minimum space per hen to a maximum weight of bird per square foot to provide greater flexibility in the regulations for organic producers that produce organic eggs from quail, emu, or other species using a similar calculation as shown in the indoor space requirement section earlier. These space requirements are the minimum allowed.

AMS is proposing to add new § 205.241(c)(6) and (7) to specify how outdoor space must be calculated. Outdoor space may not include any area which has a solid roof that is attached to the structure which provides indoor space. Areas under eaves and overhangs from the stationary barn or mobile unit may not be included as part of the outdoor space. However, the outdoor space must provide shade for the birds. For example, a structure with a solid roof that is not attached to a structure which provides indoor space may be included as part of the outdoor space. Shade may also be provided by trees or other objects in the environment.

AMS is proposing to add a new § 205.241(c)(8) to require that the

outdoor space have a minimum of 50 percent soil. The soil would allow for the birds to engage in natural foraging and dust bathing behaviors. In addition, the soil, if covered in vegetation, would provide nutrition and enrichment to help draw the birds outdoors.

AMS is proposing to add a new § 205.241(d) to describe the conditions under which organic avian livestock producers may temporarily confine birds indoors. Each period of confinement must be separately recorded with the reasons for the confinement, the duration of the confinement, and the birds or flocks which were confined. AMS is proposing to add a new § 205.241(d)(1) to provide an allowance for temporary confinement in response to inclement weather. Birds may be confined due to storms, blizzards, and other hazardous conditions. In addition, this provision allows for birds to be confined indoors when the temperature does not exceed 40 °F. It also allows birds to be denied access or brought inside when the daytime temperature exceeds 90 °F. Producers must provide documentation for confinement due to inclement weather, such as an actual thermometer reading on the farm or a local weather forecast showing the daytime high would either not exceed 40 °F or that the temperature exceeded 90 °F. Producers would have to provide outdoor access during those parts of the day when temperatures were between 40–90 °F.

AMS is proposing to add a new § 205.241(d)(2) to provide an allowance for temporary confinement indoors due to stage of life. Broilers and other meat-type birds may be confined up through 4 weeks of age. After the 4th week of life, broilers and other meat-type birds must be provided with outdoor access. Pullets may be temporarily confined indoors through 16 weeks of age. After the 16th week of life, pullets must be provided with outdoor access. The NOSB recommended that 16 weeks of age be used before required outdoor access, so that pullets could complete their vaccination program before exposure to pathogens outdoors.

AMS is proposing to add a new § 205.241(d)(3) to provide an allowance for temporary indoor confinement under conditions in which the health, safety, or well-being of the birds could be jeopardized. Permanently restricting birds to the indoors is not allowed. In addition, confinement due to potential outbreaks is not allowed. A documented case of the disease in the region or migratory pathway must be present before a temporary confinement may begin.

AMS is proposing to add a new § 205.241(d)(4) to provide an allowance for indoor confinement to prevent risk to soil or water quality. This allowance is for temporary confinement after major rain events in which the soil may be excessively soft so that the birds could create a soil or water run off risk.

AMS is proposing to add a new § 205.241(d)(5) to provide an allowance for indoor confinement for preventive health care procedures or for the treatment of illness or injury. Neither life stages nor egg laying are considered an illness for confinement purposes. This provision would allow for producers to briefly confine a flock to administer vaccinations or to confine an individual animal that required medical treatment. This provision would also allow for an injured or sick animal to be confined indoors until the animal regained health.

AMS is proposing to add a new § 205.241(d)(6) to provide an allowance for indoor confinement for sorting, shipping, and poultry sales. However, the birds must be managed organically during the entire time of confinement. 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.

AMS is proposing to add a new § 205.241(d)(7) to provide an allowance for indoor confinement to train pullets to use the nest box. However, this training period may only be a maximum of 2 weeks and must not be any longer than necessary to teach the birds the proper behavior.

AMS is proposing to add a new § 205.241(d)(8) to provide an allowance for indoor confinement for youth exhibitions, such as with 4–H or the National FFA Organization. This new provision also includes an exemption to the § 205.239(b)(6) requirement that a livestock sales facility being certified as an organic operation. As an example, if a youth exhibition and sale is held at a livestock sales facility which is not certified organic, a youth may sell birds there as organic, provided all other requirements for the organic management are met. Otherwise, non-certified sales facilities, such as auction barns, may not sell or represent livestock as organic. AMS is adding this exemption to encourage the next generation of organic producers.

AMS is proposing to add a new § 205.241(e) to require 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.

E. Transport and Slaughter

E. Transport and Slaughter

205.242	.....	New	Transportation and Slaughter.
205.242(a)	.....	New	(a) Transportation.
205.242(a)(1)	.....	New	(1) Certified organic livestock must be clearly identified as organic and transported in pens within the livestock trailer clearly labeled for organic use and be contained in those pens for the duration of the trip.
205.242(a)(2)	.....	New	(2) All livestock must be fit for transport to auction or slaughter facilities.
205.242(a)(2)(i)	.....	New	(i) Calves must have a dry navel cord and be able to stand and walk without human assistance.
205.242(a)(2)(ii)	.....	New	(ii) Sick, injured, weak, disabled, blind, and lame animals must not be transported for sale or slaughter. Such animals may be medically treated or euthanized.
205.242(a)(3)	.....	New	(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.
205.242(a)(4)	.....	New	(4) Bedding must be provided on trailer floors and in holding pens as needed to keep livestock clean, dry, and comfortable during transportation and prior to slaughter. Poultry crates are exempt from the bedding requirement. When roughages are used for bedding they must have been organically produced and handled by certified organic operations.
205.242(a)(5)	.....	New	(5) Arrangements for water and organic feed must be made if transport time, including all time on the mode of transportation, exceeds twelve hours.
205.242(a)(5)(i)	.....	New	(i) The producer or handler of an organic livestock operation must transport livestock in compliance with the Federal Twenty-Eight Hour Law (49 U.S.C. 80502) and the regulations at 9 CFR 89.1–89.5.
205.242(a)(5)(ii)	.....	New	The producer or handler of an organic livestock operation must provide all non-compliant records and subsequent corrective action related to livestock transport during the annual inspection.
205.242(a)(6)	.....	New	(6) Organic producers must have in place emergency plans adequate to address possible animal welfare problems that might occur during transport.
205.242(b)	.....	New	Mammalian Slaughter.
205.242(b)(1)	.....	New	Producers and handlers who slaughter organic livestock must be in compliance with the Federal Meat Inspection Act (21 U.S.C. 603(b) and 21 U.S.C. 610(b) and the regulations at 9 CFR part 313 regarding humane handling and slaughter of livestock.
205.242(b)(2)	.....	New	Producers and handlers who slaughter organic exotic animals must be in compliance with the Agricultural Marketing Act of 1946 (7 U.S.C. 1621, <i>et seq.</i>) and the regulations at 9 CFR parts 313 and 352 regarding the humane handling and slaughter of exotic animals.

205.242(b)(3) .....	.....	New	Producers and handlers who slaughter organic livestock or exotic animals must provide all non-compliant records related to humane handling and slaughter issued by the controlling national, federal, or state authority and all records of subsequent corrective actions during the annual organic inspection.
205.242(c) .....	.....	New	(c) Avian Slaughter.
205.242(c)(1) .....	.....	New	(1) Producers and handlers who slaughter organic poultry must be in compliance with the Poultry Products Inspection Act requirements (21 U.S.C. 453(g)(5) and the regulations at 9 CFR 381.1(b)(v), 381.90, and 381.65(b)).
205.242(c)(2) .....	.....	New	(2) Producers and handlers who slaughter organic poultry must provide all non-compliant 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 during the annual organic inspection.
205.242(c)(3) .....	.....	New	(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:
205.242(c)(3)(i) .....	.....	New	(i) No lame birds may be shackled, hung, or carried by their legs;
205.242(c)(3)(ii) .....	.....	New	(2) All birds shackled on a chain or automated system must be stunned prior to exsanguination; and
205.242(c)(3)(iii) .....	.....	New	(3) All birds must be irreversibly insensible prior to being placed in the scalding tank.

Under the OFPA at 7 U.S.C. 6509(d)(2), "Health Care," the NOSB may make recommendations "for the care of livestock to ensure that such livestock is organically produced." As stated above, in December 2011, the NOSB passed a recommendation to add standards for transportation of livestock to slaughter facilities and the slaughter process. AMS is proposing regulations, in a new § 205.242 for Transportation and Slaughter, in response to this recommendation. This proposed section would require producers and handlers of livestock to maintain organic integrity and provide for animal welfare during transportation. Further, the proposed section would clarify the requirements for slaughter of livestock by certified operations. These requirements would include performance standards regarding the transportation of livestock, including a requirement that operations comply with the Twenty-Eight Hour Law and its implementing regulations as a condition of organic certification. These requirements also would establish as a condition of organic certification compliance with the Federal Meat Inspection Act (FMIA) and Poultry Products Inspection Act requirements concerning slaughter, as

well as compliance with USDA Food Safety and Inspection Service (FSIS) regulatory requirements regarding the slaughter of exotic animals under voluntary inspection.

Transportation

AMS is proposing to publish the transportation requirements in new § 205.242(a). Section 205.242(a)(1) would require that all organic livestock be transported in a trailer/truck or in pens within the trailer/truck that are clearly identified for organic use, and that the animals remain within those pens for the duration of the trip.

AMS is proposing a new § 205.242(a)(2) to set minimum fitness requirements for livestock to be transported. Section 205.242(a)(2)(i) would require that calves have a dry navel cord, and be able to stand and walk without assistance, if they are to be transported. This provision would apply only to transport to 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) would prohibit transport of sick, injured, weak, disabled, blind, and lame animals to

auction or slaughter facilities. These animals may either be given medical treatments and cared for until they improve or euthanized.

AMS is proposing new § 205.242(a)(3) and (4) to set minimum standards for the trailer, truck, or shipping container used for transporting organic livestock. The mode of transportation would be required to provide seasonal-appropriate ventilation to protect against cold or heat stress. This provision would require that air flow be adjusted depending upon the season and temperature. In addition, bedding would be required to be provided on trailer floors as needed to keep livestock clean, dry and comfortable. If roughage is used as bedding, the bedding would need to be organically produced and handled. Use of non-organic bedding would cause loss of organic status for all animals transported. Poultry crates would be exempted from the bedding requirement.

Section 205.242(a)(5) would require that all livestock must be provided with organic feed and clean water if transport time exceeds 12 hours. The 12 hour time period includes all times in which the animals are on the trailer/truck/shipping container but not moving. In

cases such as poultry slaughter where requirements do not allow feed 24 hours before slaughter, producers and slaughter facilities would need to ensure that transport time did not exceed 12 hours, as the birds would need to be fed at that time.

AMS is proposing new § 205.242(a)(5)(i) and (ii) to clarify the authority of the NOP, certifying agents and State organic programs to initiate compliance action if certified operations are found to have violated the Twenty-Eight Hour Law (49 U.S.C. 80502) and its implementing regulations at 9 CFR 89.1 through 89.5. In general, this law provides that animals may not be confined for more than 28 consecutive hours without unloading for feeding, watering and rest. The USDA Animal and Plant Health Inspection Service (APHIS) enforces this law and has approved in-transit feed, water and rest stations. Violators of the Twenty-Eight Hour Law are subject to civil penalties. In the event that a certified operation receives a non-compliance or civil penalty under the Twenty-Eight Hour Law, the certified operation must present those records to the certifier during the annual organic inspection.

AMS is proposing a new § 205.242(a)(6) to require operations which transport livestock to sales or slaughter to have in place emergency plans that adequately address problems reasonably possible during transport. Such emergency plans could include how to provide feed and water if transport time exceeded 12 hours, if livestock escaped during transport, or how to euthanize an animal hurt during transport. Shipping and/or receiving operations would need to include these plans in their OSPs.

Slaughter and the Handling of Livestock in Connection With Slaughter

AMS is proposing a new § 205.242(b), regarding mammalian slaughter, to clarify the authority of the NOP, certifying agents and State organic programs to initiate compliance action if certified operations are found to have violated FSIS regulations governing the humane handling of mammalian livestock in connection with slaughter (note that AMS is separating mammalian from avian slaughter requirements due to the differences in how mammalian and avian livestock are handled and slaughtered). This new section, entitled "Mammalian Slaughter," would govern the 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"

are 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 would apply to all certified organic operations that slaughter these animals.

AMS is proposing to add a new § 205.242(b)(1) to require 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. 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 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, *e.g.*, prod use, slips and fall, stunning effectiveness and incidents of egregious inhumane handling.¹³ 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.¹⁴ 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 is proposing to add a new § 205.242(b)(2) for those certified organic facilities which 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 313. Violation of these regulations can result in a denial of service by FSIS.

AMS is proposing to add § 205.242(b)(3) to require that all certified organic slaughter facilities provide any FSIS noncompliance records or corrective action records relating to humane handling and slaughter during the annual organic inspection. 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 presented during the annual organic inspection to verify that the slaughter facility is in full

¹³ FSIS Directive 6900.2, Revision 2, *Humane Handling and the Slaughter of Livestock*, August 15, 2011.

¹⁴ *Humane Handling and Slaughter Requirements and the Merits of a Systematic Approach To Meet Such Requirements*, FSIS, 69 FR 54625, September 9, 2004.

compliance and has taken all corrective actions. In addition, AMS recognizes that in the United States 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 during the annual inspection.

Slaughter and the Handling of Poultry in Connection With Slaughter

AMS is proposing a new § 205.242(c), regarding avian slaughter facilities. Section 202.242(c)(1) would clarify 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. 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 United States. However, the organic standards for avian slaughter will apply to all species biologically considered avian or birds. The NOSB did not directly address avian slaughter requirements. However, AMS is proposing avian slaughter requirements for consistency with the proposed 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, 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)).

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.¹⁵

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 handling them in a way that will cause death or injury or 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 scalding.¹⁶ 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.¹⁷

AMS is proposing a new § 205.242(c)(2) to require 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. 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 presented during the annual organic inspection to verify that the slaughter facility is in full

¹⁵ *Treatment of Live Poultry Before Slaughter*, FSIS, 70 FR 56624, September 28, 2005.

¹⁶ FSIS Directive 6100.3, Revision 1, *Ante-Mortem and Post-Mortem Poultry Inspection*, April 30, 2009.

¹⁷ FSIS Notice 07–15, *Instructions for Writing Poultry Good Commercial Practices Noncompliance Records and Memorandum of Interview Letters for Poultry Mistreatment*, January 21, 2015.

compliance and has made all corrective actions. In addition, AMS recognizes that in the U.S. some slaughter facilities 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 presented during the annual organic inspection.

Unlike the requirements for livestock slaughter inspection, exemptions from poultry slaughter inspection exist for some poultry which is going to be sold to the public. AMS is proposing 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.

AMS is proposing new § 205.242(c)(3)(i) through (iii) to require that poultry slaughter operations which are either exempt or not covered by the requirements of the PPIA meet animal welfare standards that non-exempt slaughter operations must meet. AMS is proposing to require that no lame birds be hung on shackles by their feet. AMS is proposing to require 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 and, instead, place the birds in killing cones before exsanguinating the birds without stunning. AMS is proposing a new § 205.242(c)(3)(iii) to require that all birds be irreversibly insensible prior to being placed in the scalding tank.

Requests for Comment on Proposed Slaughter Regulations

As stated above, by proposing that compliance with the FSIS slaughter requirements for livestock and poultry be a condition of organic certification, AMS would be establishing requirements that govern the majority of mammalian and avian species slaughtered by organic operations for human food in the United States. However, the FMIA and PPIA provide for alternatives to Federal inspection of slaughter not addressed by this proposal. Further, the import of meat and poultry products produced by slaughter establishments in other countries raises issues not addressed in

this proposal. AMS requests specific comments on these areas:

State-Inspected Slaughter Establishments

Meat and poultry establishments have the option to apply for Federal or State inspection if they are located in states that operate under a cooperative agreement with FSIS. State programs must enforce requirements "at least equal to" those imposed under the FMIA, PPIA and HMSA. However, product produced under state inspection can only be sold or distributed in intra-state commerce, unless a State opts into an additional cooperative program, the Cooperative Interstate Shipment Program. How should AMS regulate livestock slaughter conducted at certified operations inspected by State inspection programs?

Poultry Exemptions

The PPIA exempts from continuous inspection a number of types of establishments that slaughter poultry based on various factors, including volume of slaughter and the nature of operations and sales. In some cases, these establishments would be inspected by State or local government agencies. How should AMS regulate poultry slaughter at certified operations exempt from FSIS inspection?

Meat and Poultry Imports

Under certain conditions, meat and poultry products may be imported into the United States from operations in countries whose food regulatory systems are determined by FSIS to be equivalent with its regulatory system. Equivalence would include meeting the goals of the humane slaughter requirements for livestock and the good commercial practice requirements for poultry slaughter. Verification of compliance with equivalent slaughter requirements would be performed by regulatory authorities in the exporting countries. How should AMS regulate livestock slaughter by certified operations in foreign countries?

F. Other Amendments Considered/Implementation

AMS describes below where we are significantly changing or omitting provisions from the NOSB recommendations. The full NOSB recommendations which serve as the basis for this action are available on the AMS Web site at <https://www.ams.usda.gov/rules-regulations/organic/nosb>. The NOSB recommendations are further described in the Background section of this notice and in the description of the proposed

amendments. In a few instances, AMS is incorporating NOSB requirements with minor alterations. For example, AMS is proposing a maximum of two weeks for nest box training of poultry, compared to the five weeks recommended by the NOSB. In general, minor alterations were made to either align with third-party animal welfare standards or reduce potential paperwork burden.

Documentation and Lists. The NOSB recommendations included additional recordkeeping requirements to track practices and animal status. Examples included (1) an annual submissions of lists of all existing and purchased animals, (2) a list of animals with health issues and the treatment provided, and (3) a list of animals that left the operation and why they left. AMS did not include these explicit provisions in order to reduce duplication and minimize the paperwork burden. Producers are already required to maintain records on practices and procedures, and describe monitoring practices and procedures under the current scope of the organic system plan in § 205.201. In addition, the current USDA organic regulations require certified operations to maintain records that are adapted to the particular business the operation is conducting and fully disclose all activities and transactions in § 205.103(b). Therefore, the documentation and recordkeeping provisions that the NOSB recommended would already be met under the current regulations and would be sufficient to verify compliance with the proposed requirements.

Avian indoor space requirements. AMS considered the NOSB recommendation that only the first level of indoor space be included as indoor space; and that perching areas and nest boxes could not be used in the calculation of floor space. In effect this would prohibit aviary-style housing, where chickens occupy multi-levels within a house, in organic poultry production. A sizeable portion of organic egg production currently comes from operations using aviary houses. AMS is not including that provision because the existing and proposed requirements for shelter and indoor space will ensure that these areas accommodate the birds' natural behavior regardless of housing type. To ensure that birds occupying the upper levels would go outside, this proposed rule would require that producers must train birds to go outside, that exit areas are of sufficient size and number to facilitate easy exit and that there are enticements in the outdoor areas to attract birds outside. Finally, AMS understands that aviary houses are not

prohibited in other third party animal welfare certification programs.

Livestock health care. AMS considered the NOSB recommendation to require livestock producers to use homeopathic remedies or botanicals before they could use appropriate, synthetic medications. AMS is not implementing this requirement because of the potential that this could delay the use of effective treatments for sick or injured animals. AMS examined the scientific basis for requiring homeopathic remedies or botanicals and found insufficient evidence that these substances would be more effective than conventional treatments to support a blanket requirement for use. The NOSB recommendation did not provide this information. This does not impact an organic producer's ability to use homeopathic remedies or botanicals on livestock as long as they do not contain unapproved synthetics or prohibited naturals, such as, strychnine from *Nux vomica*. However, if livestock are sick or injured, organic producers must not delay use of an appropriate medical treatment by administering an unproven remedy.

Slaughter performance standards. The NOSB recommended a series of performance standards for slaughter facilities which would have required extensive paperwork for the facilities. However, considering the current shortage of organic livestock slaughter facilities, AMS is proposing the requirements in this document with the goal of limiting the burden on extant organic slaughter facilities. AMS regularly receives comments from organic livestock producers about the lack of availability of organically certified slaughter facilities. Certified organic livestock slaughtered in a non-certified slaughter facility cause the resulting meat to lose organic status. AMS consulted with FSIS about the specific NOSB performance standards and determined that most of these additional requirements would be duplicative. This duplication would have increased the paperwork burden and cost of inspection without increasing animal welfare. AMS was concerned that such an increased burden with no increase in animal welfare would further limit the availability of certified organic slaughter facilities. Below is a table listing some of the NOSB recommended slaughter performance standards and the corresponding FSIS regulations.

NOSB Recommendation or AMS preliminary draft proposed regulatory text	FSIS Response
<p>Mammalian Slaughter</p>	
(1) Slaughter plants must have non-slip flooring	<p>This provision is covered by 9 CFR 313.1(b)—Floors of livestock pens, ramps, and driveways shall be constructed and maintained so as to provide good footing for livestock. Slip resistant or waffled floor surfaces, cleated ramps, and the use of sand, as appropriate, during winter months are examples of acceptable construction and maintenance.</p>
(2) Gates in the live animal area must swing freely, latch securely, and be free of sharp or otherwise injurious parts. Gates are never to be slammed on animals.	<p>This provision is covered by 9 CFR 313.1(a)—Livestock pens, driveways and ramps shall be maintained in good repair. They shall be free from sharp or protruding objects which may, in the opinion of the inspector, cause injury or pain to the animals.</p>
(3) Adequate lighting must be in place to allow animals to be easily observed.	<p>This provision is covered by—9 CFR 309.1(a)—All livestock must be examined and inspected on day of slaughter. This requires that lighting is sufficient for inspectors to easily observe the animals.</p>
(4) Livestock slips and falls must be scored in all parts of the facility including unloading areas, holding areas, chutes, stun box and the stunning area. No more than 1 percent of livestock may slip and no more than 1 percent of livestock may fall at any of the parts of the facility.	<p>This provision is covered by—9 CFR 313.2(a)—Driving livestock from the unloading ramps to the holding pens and from the holding pens to the stunning area shall be done with a minimum of excitement and discomfort to the animals. Livestock shall not be forced to move faster than a normal walking speed. Scoring provided for in FSIS Directive 6910.1—Acceptable-No falls; Acceptable with reservations-less than 1 percent.</p>
(5) Humane treatment procedures for handling immobile and fatigued animals upon arrival at the slaughter plant are in place. Handlers may use sleds and place livestock in the bucket, but may not push them up against a wall, gate, or any other object.	<p>This provisions is covered by—9 CFR 309.3(e)—Non-ambulatory cows are to be euthanized—). FSIS has proposed to require that non-ambulatory veal calves need to be euthanized. Other livestock are addressed in 9 CFR 313.2(d)—Disabled livestock and other animals unable to move.</p>
(6) Electric prods are available if needed for human safety or for medical use, i.e., in an effort to save down animals. Prod use must stop after three shocks interspersed with rest periods or if the animal does not attempt to rise. Prods may never be applied to sensitive parts of the animal: eyes, nose, ears, rectum, or reproductive organs. Prods may not be used on animals less than twelve months of age.	<p>This provision is covered—9 CFR 313.2(b)—Electric prods, canvas slappers, or other implements employed to drive animals shall be used as little as possible in order to minimize excitement and injury. Any use of such implements which, in the opinion of the inspector, is excessive, is prohibited. Scoring in FSIS Directive 6910.1.</p>
(7) Plans for euthanasia of sick livestock must be described. Euthanasia must only be performed by trained personnel. Euthanasia equipment must be properly stored at slaughter plants and maintained. Lists of all animal euthanized and the reason for euthanasia must be maintained.	<p>This provision is covered by 9 CFR 309.13—Condemned animals are to be killed by establishment and not taken into official establishment.</p>
(8) No more than 3 percent of cattle vocalize as they move through the restrainer, stunning box and stunning area. No more than 5 percent of hogs squeal in the restrainer due to human provocation. No more than 5 percent of livestock vocalize when a head holder is used during stunning or slaughter. No more than 1 percent of hogs vocalize due to hot wandling. Electrodes must not be energized before they are in firm contact with the animal.	<p>FSIS does not have a vocalization standard. Vocalization is only as evidence that animal was not properly stunned in FSIS Directive 6910.1.</p>
(9) Conscious, sensible mammals must never be restrained by suspending them by their limbs. One hundred percent of animals are insensible prior to being hung on the bleed rail.	<p>This provision is covered by—9 CFR 313.2(f)—Stunning methods approved in 313.30 shall be effectively applied to animals prior to their being shackled, hoisted, thrown, cast, or cut. FSIS Directive 6910.1 Stunning efficacy must be 100 percent.</p>
(10) One hundred percent of mammals are insensible prior to being hung on the bleed rail.	<p>This provisions is covered by—9 CFR 313.2(f)—Stunning method approved in 9 CFR313.30 shall be effectively applied. This provision is also covered in FSIS Directive 6910.1—The DVMS is to observe and verify that animals are unconscious and insensible after stunning and throughout the process of shackling, hoisting, cutting, and bleeding.</p>
(11) Ninety-five percent of cattle and sheep are effectively stunned with one shot via captive bolt or gunshot. Ninety-nine percent of electrodes are placed correctly when livestock are stunned with electricity.	<p>This provisions is covered by—9 CFR 313.15(a)(3), 313.16(a)(3), 313.30(a)(3)—Requires that animal be in state of unconsciousness immediately after first stun. This provision is also covered in FSIS Directive 6910.1—Acceptable stunning is 100 percent. Acceptable with reservations is effectiveness of greater than 99 percent but less than 100 percent.</p>
(12) When carbon dioxide (CO2) or other controlled atmosphere stunning systems, including gondolas or other conveyances for holding a group of animals, are used, animals must be able to lie down or stand without being on top of one another. When head to tail conveyor systems are used, this score may be omitted.	<p>This provision is covered by 9 CFR 313.5.</p>
<p>Avian Slaughter</p>	<p>Avian slaughter is addressed in FSIS Directives 6100.3 and 6910.1. Operations meet good commercial practices, 9 CFR 381.65(b).</p>
(1) No lame birds may be shackled, hung or carried by their legs	<p>This provisions is—included as Mistreatment of poultry, which is addressed in FSIS Directive 6100.3—establishment employees must not mistreat birds or handling them in a way that will cause death or injury or prevent thorough bleeding or result in excessive bruising.</p>

NOSB Recommendation or AMS preliminary draft proposed regulatory text	FSIS Response
(2) All birds shackled on a chain or automated system must be stunned prior to exsanguination. (3) All birds must be irreversibly insensible prior to being placed in the scalding tank.	This provisions is addressed in FSIS Directive 6910.1 This provisions is covered by 9 CFR 381.65(b)—Poultry must be slaughtered in accordance with good commercial practices in a manner that will result in thorough bleeding of the carcasses and ensure that breathing has stopped before scalding.

Implementation. The provisions of this proposed rule, except for the avian outdoor space requirements in § 205.241(c), would be implemented one year after the publication date of the final rule. AMS chose a one-year period for operations and certifying agents to become familiar with the requirements and make modifications to their practices, *e.g.*, updating organic system plans, training staff.

AMS is proposing two distinct implementation timeframes for the avian outdoor space requirements. First, three years after the publication of the final rule any non-certified poultry house or facility would need to comply in order to obtain certification. This would include facilities that are not certified at the three-year mark, but subsequently become part of a certified operation. The three-year period would allow producers to transition the outdoor space to organic production.

Second, all poultry houses and facilities certified prior to the three-year mark would need to comply within five years of the publication of the final rule. AMS is choosing a five-year compliance period to reduce the economic burden on existing organic producers, without unduly delaying the implementation of practices for improved animal welfare. As explained in the Regulatory Impact Analysis, the five-year period reflects the average time remaining to fully depreciate an average barn for laying hens. Since AMS expects that the costs associated with this rule will fall primarily on organic egg producers, the five-year period will allow the average producer to write off the capital costs on their tax returns.

IV. Related Documents

Documents related to this proposed 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); 67 FR 54784 (August 26, 2002); 67 FR 62949 (October 9, 2002); and 68 FR 23277 (May 1, 2003). 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); and 71 FR 24820 (April 27, 2006). Past final rules relevant to this topic were published at: 65 FR 80548 (December 21, 2000); and 71 FR 32803 (June 7, 2006).

A. Executive Orders 12866 and 13563

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, of reducing costs, of harmonizing rules, and of promoting flexibility. This rulemaking has been designated as a “significant regulatory action” under section 3(f) of Executive Order 12866, and, therefore, has been reviewed by the Office of Management and Budget (OMB).

Need for the Rule

AMS is proposing this rulemaking to maintain consumer confidence in the high standards represented by the USDA organic seal. Specifically, this action is necessary to augment the USDA organic livestock production regulations with robust and clear provisions to fulfill a purpose of the OFPA, to assure consumers that organically-produced products meet a consistent and uniform standard (7 U.S.C. 6501). The added specificity would further the process, initiated with the enactment of OFPA, to develop detailed standards for organic livestock products.¹⁸ OFPA mandates that

¹⁸ The Senate report that accompanied the OFPA legislations 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

detailed livestock regulations be developed through notice and comment rulemaking and intends for NOSB involvement 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 ruminants, which partially addressed OFPA’s objective for more detailed standards. This present rulemaking would extend that level of detail and clarity to all organic livestock and ensure that organic standards cover their entire lifecycle.

AMS issued an administrative appeal decision in 2002 that allowed the certification of one operation that used porches as outdoor access to protect water quality. This Decision served to address a fact-specific enforcement issue. Some certifying agents used this appeal decision to grant certification to poultry operations using porches to provide outdoor access. Thereafter, certification and enforcement actions have remained inconsistent and contributed to wide variability in living conditions for organic poultry, as well as consumer confusion about the significance of the organic label with regard to outdoor access. In accordance with OFPA, this proposed action will clarify USDA statutory and regulatory mandates and establish consistent, transparent, and enforceable requirements. 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.

This proposed rule would add requirements for the production, transport and slaughter of organic livestock. Most of these align with current practices of organic operations (*e.g.*, prohibiting or restricting certain

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 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).*

physical alterations, euthanasia procedures, housing for calves and swine). The proposed provisions were developed by the NOSB in consideration of other animal welfare certification programs, industry standards, input from organic producers, and input from public comment.¹⁹ According to a survey by the Organic Egg Farmers of America, 76 percent of organic egg production in the U.S. participates in private animal welfare certification programs.²⁰ Therefore, AMS expects that many of the requirements in this proposed rule are already implemented and will not produce significant costs. Producers may incur some costs such as increased paperwork (see the Paperwork Reduction Act analysis below), building additional fences, providing shade in outdoor areas, or creating more doors in poultry houses.

This proposed action includes provisions to facilitate consistent practices regarding stocking densities and outdoor space at organic poultry operations. The outdoor space issues are divisive and controversial among producers and other stakeholders, and, therefore, the scope of this analysis focuses on impacts to the organic poultry sector. The current practices of organic poultry operations to provide outdoor access and minimum indoor and outdoor space per bird vary widely. This disparity causes consumer confusion about the meaning of the USDA organic label, threatens to erode consumer confidence in the organic label more broadly, and perpetuates unfair competition among producers. This rule would enable AMS and certifying agents to efficiently administer the NOP. In turn, the consistency and transparency in certification requirements will facilitate consumer purchasing decisions.

Consumer surveys indicate the need for more precise animal welfare standards within the USDA organic regulations. A 2014 Consumer Reports Organic Food Labels Survey noted that

half of consumers believe that organic chicken living space meets minimum size requirements; 68 percent believe there should be minimum size requirements. Further, 46 percent believe organic chickens went outdoors; 66 percent believe the chickens should have gone outdoors.²¹ A second survey, designed by the American Society for the Prevention of Cruelty to Animals, showed that 63 percent of respondents believe that organic livestock have access to pasture and fresh air throughout the day and 60 percent believe that organic livestock have significantly more space to move than non-organic animals.²²

The majority of organic poultry producers also participate in private, third-party verified animal welfare certification programs.²³ These certification programs vary in stringency, particularly for outdoor access requirements. Such widespread participation among organic poultry producers is evidence that consumers want additional label claims to provide information about animal welfare practices. This proposed rule would align consumer expectations and the production practices required to make an organic label claim regarding animal welfare for poultry.

The broad latitude afforded by the existing USDA organic regulations leads to wide variance in production practices within the organic egg sector (e.g., a porch in contrast to extensive outdoor area with diverse vegetation). These differences are not discernable to consumers through use of the USDA organic label. Consumers are increasingly aware of these varying outdoor production practices and either seek specific brands of organic eggs based on information about living conditions at individual farms, or seek animal welfare labels in addition to the USDA organic seal.

AMS believes that many livestock and poultry producers would prefer to use the organic label to convey information about their practices to consumers. While sales of organic products, including eggs and poultry, continue to increase annually, surveys designed to measure consumer trust in the organic label reveal consumer confusion about the meaning of the label. A report on organic food and beverage shoppers states that one-third of the respondents indicated that the term “organic” has no

real value or definition.²⁴ The study concludes that consumers are confused by the various marketing terms, such as “natural,” and advises organic brands to convey more information to consumers. AMS believes that in the context of organic livestock and poultry production, particularly egg production, variations in practices result in consumers receiving inadequate and inconsistent information about livestock products. This is supported by the consumer survey results described above. By establishing clear and equitable organic livestock and poultry standards, this rule would help organic producers to more effectively market their products. It would (1) provide for consistent information to consumers about animal living conditions to distinguish organic products from competing labeling terms in the market, and (2) alleviate the need for multiple certifications and eliminate duplicative paperwork, on-site inspections and additional costs.

In 2009 and 2011, the NOSB issued recommendations, as authorized by OFPA, for additional requirements to support animal welfare. In the process of developing these recommendations, the NOSB consulted with and received numerous public comments from authorities in the fields of animal welfare, consumers, livestock producers and certifying agents. AMS developed this proposed rule in response to the NOSB recommendations and stakeholder feedback.

This action also responds to the 2010 USDA Office of Inspector General (OIG) audit findings of inconsistent applications of the USDA organic regulations for outdoor access for livestock. OIG noted the absence of regulatory provisions covering the length (*i.e.*, hours per day) of outdoor access and the size of the outdoor area. Among organic poultry producers, OIG observed wide variation in the amount of outdoor space provided. As recommended by OIG, AMS published draft guidance, Outdoor Access for Organic Poultry, for public comment (75 FR 62693, October 13, 2010).²⁵ The draft guidance advised certifying agents to use the 2002 and 2009 NOSB recommendations as the basis for certification decisions regarding outdoor access for poultry. The draft guidance informed certifying agents and producers that maintaining poultry on soil or outdoor runs would demonstrate

¹⁹ NOSB, December 2011. Formal Recommendation of the National Organic Standards Board to the National Organic Program, Animal Welfare and Stocking Rates, Available at: <http://www.ams.usda.gov/rules-regulations/organic/nosb/recommendations>.

At the NOSB meeting in November 2010, the NOSB explained how the recommended handling, transport and slaughter provisions aligned with the American Meat Institute’s animal handling guidelines. These guidelines cover handling, transportation and slaughter and are standard industry practices. The transcripts from that meeting are available at: <http://www.ams.usda.gov/rules-regulations/organic/nosb/meetings>.

²⁰ Organic Egg Farmers of America (OEFA), Organic Poultry Industry Animal Welfare Survey, 2014.

²¹ Consumer Reports National Research Center, Organic Food Labels Survey, March 2014. Nationally representative phone survey of 1,016 adult U.S. residents.

²² This phone survey was administered to 1,009 adults in October 2013.

²³ Organic Egg Farmers of America, 2014.

²⁴ Mintel Group Ltd., “Organic Food and Beverage Shoppers—US—March 2015.” March 2015.

²⁵ The draft guidance was published on March 10, 2013 and posted on the NOP Web site.

compliance with the outdoor access requirement in § 205.239. However, after extensive comments by producers, certifying agents and other stakeholders, including the request for rulemaking, AMS determined to pursue rulemaking to clarify outdoor access for poultry and did not finalize the guidance.

Baseline

This baseline focuses on the current production of organic eggs and the market for this commodity. AMS used multiple data sources, listed below, to describe the baseline and inform our assumptions for the cost analysis:

- 2011–2014 Organic Industry Surveys, published by the Organic Trade Association (OTA). The Nutrition Business Journal conducts this annual survey on behalf of OTA to summarize market information and trends within the organic industry across food and non-food sectors.²⁶
- 2014 Organic Survey, National Agricultural Statistics Service (NASS).²⁷ This survey reports acreage, production and sales data for organic crops and livestock.
- 2011 Organic Production Survey, National Agricultural Statistics Service (NASS).²⁸ This survey reports acreage, production and sales data for organic crops and livestock.
- The National Animal Health Monitoring and Surveillance (NAHMS) 2013 Layers study.²⁹ This study includes a section on organic egg production in the U.S., which provides

an overview of various practices on organic layer operations.

- AMS also used summary information from the USDA Livestock, Poultry and Grain Market News Service (Market News) egg and broiler market news reports from 2010 to 2014.^{30 31}
- Organic Egg Farmers of America (OEFA), Organic Poultry Industry Animal Welfare Survey, 2014. OEFA independently conducted and submitted the results of a survey of organic egg and broiler producers. There were 157 survey responses, representing 8.33 million organic layers (77 percent of organic production) and 12 million organic broilers (62 percent of production). The survey was distributed to certified organic poultry producers in July 2014.
- Egg Industry Center (EIC) Survey of U.S. Organic Egg Production. EIC independently conducted and submitted this survey which was distributed to organic egg producers with at least 30,000 hens. Respondents totaled 23, representing 5.07 million hens.
- Economic Impact Analysis of Proposed Regulations for Living Conditions for Organic Poultry, Phase 3 Report by T. Vukina, K. Anderson, M.K. Muth and M. Ball. This report, prepared for the NOP, estimated the costs for implementing the NOSB recommendation on avian living conditions. The analysis in this proposed rule essentially updates and expands the model used by Vukina et al., to estimate current costs and different producer response scenarios.

The Organic Egg and Poultry Market

According to the 2015 Organic Trade Association (OTA) Industry Survey, U.S. sales of organic food, fiber, and agricultural products totaled over \$39.1 billion in 2014, up 11 percent from 2013.³² Sales of organic eggs reached \$514 million in 2014, an increase of 17 percent over the previous year. This sector has experienced continued double-digit sales growth since 2010, as shown in Table 2. In addition, the average retail price for one dozen, organic brown eggs has climbed 16.3 percent on average, each year between 2010 and 2014. The rate of growth may be affected by several factors, including: (1) The price gap between organic and non-organic eggs based on the cost of organic and non-organic feed—this may slow or increase growth depending on size of the gap; (2) factors other than price driving consumer purchasing decisions, e.g., concerns about production practices; (3) competition from cage-free labels; and (4) accuracy in forecasting consumer demand.

In 2014, poultry sales (\$453 million) grew nearly 13 percent and accounted for the greatest portion (60 percent) of the organic meat, poultry and fish market sector. As shown in Table 2, annual sales of organic poultry have climbed steadily since 2010, while retail prices for organic boneless, skinless breasts have fallen.³³ In comparison to beef, pork, and other meat products, poultry faces fewer obstacles to growth because feed for poultry is cheaper and time to market is shorter.³⁴

TABLE 2—ORGANIC EGGS AND BROILERS MARKET—RETAIL SALES

Subcategory	Year	Annual sales (million \$)	Percent growth	Average retail price ^b (dozen eggs ^c /boneless, skinless breast)
Eggs	^a 2014	514	17	4.16.
	2013	439	16.9	4.16.
	2012	375	17.5	4.11.
	2011	319	20.2	3.90.
	2010	266	10.4	3.85.
Poultry	^a 2014	453	12.9	7.37/lb.
	2013	401	9.3	7.20/lb.
	2012	367	10.8	7.38/lb.
	2011	331	12.5	7.49/lb.

²⁶ Organic Trade Association (OTA)/Nutrition Business Journal, 2014 Organic Industry Survey. Nutrition Business Journal conducted a survey between Jan 27, 2014 and April 5, 2014 to obtain information for their estimates. Over 200 organic firms responded to the survey. NBJ used secondary data from SPINS, Nielsen, and IRI to supplement the survey and build market statistics.

²⁷ The 2014 Organic Survey is accessible at: http://www.agcensus.usda.gov/Publications/Organic_Survey/.

²⁸ The 2011 Organic Production Survey is accessible at: <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1859>.

²⁹ The NAHMS Poultry studies may be found at the following link: <http://1.usa.gov/1kWw22>.

³⁰ USDA AMS LPS Market News (Market News) 2010–2014 Egg Market News report. Available on the Market News Web site at: <http://1.usa.gov/1vIDNgy>.

³¹ USDA AMS LPS Market News (Market News) 2010–2014 Broiler Market News report. Available on the Market News Web site at: <http://1.usa.gov/1uHsme1>.

³² OTA, 2015 Organic Industry Survey.

³³ Retail prices for organic whole fryers per pound have fluctuated between 2010 and 2014, peaking in 2012 and falling the following two years.

³⁴ OTA, 2010–2014 Organic Industry Surveys.

TABLE 2—ORGANIC EGGS AND BROILERS MARKET—RETAIL SALES—Continued

Subcategory	Year	Annual sales (million \$)	Percent growth	Average retail price ^b (dozen eggs ^c /boneless, skinless breast)
	2010	294	6.3	7.54/lb.

^a As of September 5, 2014.

^b Based on supermarket advertised sale prices reported by AMS Livestock, Poultry and Seed Market News (see footnotes 19 and 20).

^c Brown, Large, Grade A.

Table 3 shows the geographical distribution of organic egg and broiler production in the U.S., based on the USDA 2014 Organic Survey. There are an estimated 722 organic egg producers and 245 organic broiler operations. Five states are responsible for over one-third of organic egg production. Pennsylvania and California operations comprise only

7.5 percent of the total number of organic poultry producers, but produce 35 percent and 32 percent, respectively, of organic eggs. California also has 6.5 percent of U.S. organic broiler operations, which produce about 54 percent of organic broilers. Conversely, the production from states which report higher numbers of broiler operations,

such as Wisconsin and Maine, is less than 1 percent of production. Several states do not report total production volume for broilers to protect confidentiality. Given these omissions, the data does not provide details of nearly 50 percent of state level production of organic broilers.

TABLE 3—TOP STATES WITH ORGANIC EGG AND POULTRY OPERATIONS COMPARED TO PRODUCTION

	Number of organic egg operations	Percent of US organic egg operations	Total production (dozens)	Percent of US organic egg production
Organic Eggs^a				
United States	722	.....	166,313,847	.....
Top 5 States ^c	334	46.1	61,157,980	36.7
Wisconsin	97	13.3	7,450,488	12
Iowa	74	10.2	8,628,066	14
Maine	55	7.6	4,051,040	7
Pennsylvania	54	7.5	21,623,599	35
California	54	7.5	19,449,787	32
Organic Broilers^a				
	Number of organic broiler operations	Percent of US organic broiler operations	Total production (birds)	Percent of US organic broiler production ^e
United States	245	.....	43,255,401	.....
Top 5 States ^c	130	53	^d 23,319,734	53.9
Wisconsin	32	13	21,104	0
Pennsylvania	30	12.2	N/A	N/A
New York	28	11.4	N/A	N/A
Maine	24	9.8	23,134	0
California	16	6.5	23,275,496	53.8

^a **Source:** National Agricultural Statistics Service, “2014 Organic Survey.”

^c States ranked by both number of farms and total production.

^d This total does not include production for Pennsylvania and New York. The 2014 Organic Survey does not disclose the broiler production data for those states. In order to protect confidentiality, any tabulation which identifies data reported by a respondent or allows a respondent's data to be accurately estimated is not disclosed.

^e There were other states that had higher production than the states reporting in this table, but had fewer organic broiler operations. Kentucky produced 27,685 broilers, but only had 7 organic broiler operations. Michigan produced 13,018 broilers, but had only 6 organic broiler operations.

Alternatives Considered

AMS considered alternatives to the proposed action. Specifically, AMS reviewed options for indoor stocking

density and outdoor space requirements for layers and implementation timeframes. For each alternative, AMS examined how the provision aligned with the animal welfare objectives

supported by the organic community and the potential costs and benefits to organic producers. The options are presented and discussed below.

TABLE 4—INDOOR STOCKING DENSITY OPTIONS—LAYING HENS

Alternative	Basis
Option 1—Minimum of 2.0 ft ² per layer	Consistent with the NOSB recommendation. This would provide more space per bird than private animal welfare standards.
Option 2—Minimum of 1.8 ft ² per layer	Provides increased space for birds while curtailing costs. On par with most stringent private third-party animal welfare standard.
Option 3—maximum 3.0 to 4.5 lbs/ft ² depending upon the housing system. ^a (Proposed rule)	Consistent with current industry practice for many organic egg producers. Aligns with the majority of private third-party animal welfare certification programs.

^aThis is equivalent to 1.0–1.5 ft² per bird. The reasoning and method for converting to pounds per square foot is discussed in the preamble section C for Avian Living Conditions.

The NOSB recommended indoor and outdoor space metrics for poultry as a component of broad measures to enhance animal welfare practices on organic livestock operations. Citing consumer demand for humane treatment of livestock, the proliferation of animal welfare certification labels, organic standards of major trading partners (e.g., Canada, the European Union), and varying practices among organic producers, the NOSB determined it was necessary to set maximum stocking densities for organic poultry.³⁵ The NOSB aimed to develop stringent, comprehensive, and consistent animal welfare requirements for organic livestock and poultry production that would meet consumer demand and foster equitable certification decisions and fair competition among producers, consistent with the objectives of OFPA. The costs and benefits of the proposed alternatives are discussed in more detail in the next section below.

Indoor stocking density. AMS considered a range of indoor stocking densities, including 2.0 ft²/bird or 1.8 ft²/bird for all layer operations, or 1.0–1.5 ft²/bird depending on the housing system. The NOSB recommended a minimum of 2.0 ft² per hen indoors and explained that the metric could be adjusted during colder months to allow producers to increase the density to maintain heat in poultry houses. In order to examine the difference in costs, AMS also considered setting the indoor stocking density at 1.8 ft² to parallel the most stringent indoor stocking density of a private animal welfare certification standard.

³⁵ The European Union Organic Standards and the Canadian Organic Regime Standards specify indoor and outdoor stocking densities for various types of livestock, including laying hens: 6 birds/m² indoors; 4 birds/m² outdoors. After converting the units for the stocking densities recommended by the NOSB, the metrics are comparable to the EU and Canada: the NOSB would require slightly more space per bird indoors and slightly less outdoors. This proposed rule would adjust the indoor stocking density to allow more birds to occupy a given unit of indoor area.

AMS is not pursuing the 2.0 ft²/bird or 1.8 ft²/bird options. The estimated costs to implement a 1.8 ft²/bird indoor stocking density range between \$70 million to \$260 million annually depending on various producer response scenarios.^{36 37} AMS considered the estimated costs associated with the alternatives for reduced stocking densities would be unduly burdensome on individual organic egg producers and could cause a sizeable reduction in the supply of organic eggs. We believe that requiring 2.0 ft² or 1.8 ft² per bird would adversely impact most organic egg production and likely cause approximately 80 percent of current organic egg production to exit the organic market. Reducing the number of layers to comply with those stocking densities would result in lost revenue and increased marginal operating costs from the reduced number of birds or compel producers to incur high capital costs for building additional housing to accommodate existing production levels.

AMS is proposing to set the indoor stocking density based on housing systems as follows: 4.5 lbs/ft² (equivalent to 1.0 ft² per bird) for pastured poultry and aviary/multi-level housing; 3.75 lbs/ft² (1.2 ft² per bird) for poultry houses with slatted/mesh flooring systems and 3.0 lbs/ft² (1.5 ft²

³⁶ AMS evaluated the costs for 4 different producer response scenarios: (1) All producers incur costs to maintain their current level of production; (2) some producers maintain their current level of production and some transition to the cage-free egg production; (3) all producers comply with the proposed rule by maintaining their existing facilities (and reduce the number of birds to meet the indoor stocking density); and, (4) some producers comply by maintaining existing facilities while other producers transition to cage-free egg production. Producers who exit to the cage-free market would be expected to have lower net returns, compared to organic eggs, as discussed below in the Costs section.

³⁷ These cost were projected over a 10-year period versus a 13-year period which was used for the estimated costs for the proposed rule provided in the section below. AMS used a 10-year period in the initial cost estimates to compare various alternatives.

per bird) for poultry houses with floor litter. These metrics are consistent with the standards of a common third-party animal welfare certification program. We expect that most organic poultry producers currently meet or exceed those levels. This proposed rule would require certain features for the housing, including perches and flat roosts and space for dust bathing and self-isolation. These measures, in conjunction with the stocking density, support the natural behaviors and well-being of the birds. The tiered indoor stocking densities will foster a consistent level of poultry living conditions. It would also ease any disparate burden on producers in colder climates while maintaining consistency throughout the industry and meeting consumer expectations for organic poultry production.

Outdoor stocking density. The USDA organic regulations require that livestock have year-round access to the outdoors, fresh air, direct sunlight and shade (§ 205.239(a)). Other than identifying circumstances when livestock may be temporarily confined (§ 205.239(b)), the regulations do not provide details on the frequency or duration of outdoor access or size of the outdoor space. Outdoor access is integral to organic production, and consumers expect that it is standard practice throughout the organic egg sector. Notably, outdoor access is not mandatory for all third-party animal welfare certification programs. AMS is proposing to set outdoor stocking densities for poultry and to clarify whether porches are acceptable for outdoor access.

AMS is proposing that layers must have a maximum of 2.25 pounds/ft² in the outdoor area.³⁸ Under this proposed rule, outdoor areas would need to be large enough to hold all birds simultaneously with a maximum of 2.25 pounds/ft². This is consistent with the

³⁸ As discussed above, this is approximately equivalent to 2.0 square feet per bird. AMS changed the units to pounds per square foot so that the actual space per bird is similar across birds of different species or breeds.

NOSB recommendation for outdoor stocking density.³⁹ The NOSB selected that minimum threshold to protect soil quality and minimize parasite loads.

The NOSB also stipulated that outdoor access areas be soil-based and have at least 50 percent vegetation cover. While AMS believes that vegetation is an important feature to encourage birds to use outdoor areas, we are not proposing a minimum vegetation requirement, as that may be difficult to maintain in certain locations with drier climates. However, AMS is proposing to require enrichment of the outdoor space which could be met with 50 percent vegetative cover. This proposed rule would require that the outdoor area have at least 50 percent soil. Chickens use soil for dust bathing, and this would support the NOSB's objective to encourage birds to occupy outdoor areas. This soil threshold would also uphold consumer expectations for outdoor access, while providing some flexibility for operations which currently have concrete or other surfaces in the outdoor area. AMS did not estimate the potential cost to implement this proposed requirement due to wide variability in the site-specific conditions. AMS does make assumptions about whether producers have the adequate land base to accommodate the outdoor stocking density and we have estimated the costs for obtaining needed land as discussed below. However, even producers who have the adequate land base may need to modify that area (e.g. install fencing) to provide access to the soil.

AMS considered proposing minimum space requirements of 2.25 pounds/ft² to accommodate either 10 percent, 50 percent or 100 percent of layers in a house to be outdoors at one time. AMS examined the 10 and 50 percent alternatives based upon information that only a portion of a flock is outdoors at any given time. Under the 10 and 50 percent scenarios, the maximum stocking density would be exceeded whenever more than 10 percent or 50 percent of the flock is outdoors. As an example, in the 10 percent scenarios, if 20 percent of the flock was outside, then stocking density would be effectively reduced by 50 percent. Requiring the outdoor space to accommodate only 10 percent of a flock would sanction the

status quo, and operations which provide the least amount of outdoor area would be permitted to maintain those conditions.

The monetary costs of a 10 percent or 50 percent alternative would be substantially lower than the estimated costs of the proposed rule. As discussed below, the increased outdoor access requirements for all birds drives the costs of the proposed rule by reducing production volume and increasing operating expenses (land and feed). Under these alternatives, most organic producers would not need to acquire additional land and birds would have reduced exposure to predators and parasites. However, selecting the lower cost alternative would undermine the preferences of many organic egg producers and consumers; the success of the organic label marketing program depends upon practices which reflect the preferences of the participants and consumers who chose organic eggs in the marketplace. Adequate outdoor access is a core concern among organic consumers; outdoor areas that accommodate relatively few birds would not align with consumer expectations and would perpetuate an uneven playing field among producers. Further, the higher density may be detrimental to soil quality and parasite loads.

Requiring that the outdoor area accommodate half of the flock would not adequately provide for each bird to have outdoor access with space to express natural behaviors. This could work as a disincentive for birds to go outside and does not support the intent of the USDA organic regulations that livestock use outdoor areas. Further, consumers expect all organic livestock to have access to and use outdoor space, and this approach could have unknown, but likely negative, impacts on consumer confidence in the organic egg sector. Given the likelihood that more than half of a flock would use the outdoor area simultaneously and consistently, we believe that resulting crowding in the outdoor area from a higher stocking density would ultimately deter birds from occupying the outdoor space. Together, the proposed stocking density requirements and the requirements for birds to be outdoors at an early age, including that these areas provide shade and soil access, should encourage more than half of the flock to regularly occupy this space.

Porches as outdoor areas. AMS also considered whether porches should count as outdoor space. In general, a porch is a screened-in area with a solid roof overhead. AMS estimates that at

least 50 percent of organic egg production comes from operations that use porches exclusively to provide outdoor access. The use of porches for outdoor access on organic operations is contentious. The practice of using porches to provide outdoor access in organic poultry operations gained popularity following a 2002 AMS administrative appeal decision which allowed the certification of one poultry operation planning to provide outdoor access via porches. This appeal decision was used by some poultry producers to justify that porches may satisfy the requirement to provide outdoor access for poultry under the USDA organic regulations. Organic production systems utilizing porches to provide outdoor access have increased since that time.

In 2011, the NOSB, with the support of numerous producer and consumer stakeholders, unanimously recommended that enclosed, covered porches should not be considered outdoor access. Consistent with that recommendation, this proposed rule specifically defines "outdoors" to exclude porches. The stipulation that porches are not outdoor space is consistent with the U.S. Food and Drug Administration (FDA) position. In July 2013, FDA published draft guidance on outdoor access under the FDA 2009 Prevention of Salmonella Enteritidis in Shell Eggs regulations.⁴⁰ The draft guidance states that structures attached to the poultry houses, such as porches, would be subject to testing and sanitizing in the same way as the actual poultry house, while the ground and other outdoor areas would not be subject to those testing and sanitizing requirements. Notably, FDA's draft guidance states that covered porches are part of the poultry house.

Proponents of porches state that they are essential for biosecurity to protect poultry from predation and disease that could result from contact with wild animals or feces. However, producers, consumers and other stakeholders who oppose porches state that porches provide a competitive advantage by reduced mortality to predator loss and decreased feed conversion rates (less feed to produce a dozen eggs). Opponents have challenged the contention that porches are essential to biosecurity, citing other disease control methods, such as the removal of vegetation directly outside the poultry

³⁹ The NOSB recommended a range of 2.0 ft²—5.0 ft² per bird in the outdoor areas, explaining that a minimum of 5 ft² would ensure the availability of vegetation to birds during the growing season. As discussed in the paragraph below, AMS is not adopting a vegetation requirement for the outdoor area. In addition, we believe that a minimum 5.0 ft²/bird outdoor stocking density would be untenable because of the additional land needed.

⁴⁰ 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) <http://www.fda.gov/food/guidanceregulation/guidancedocuments/regulatoryinformation/eggs/ucm360028.htm>.

house, the use of netting over outdoor areas and placing footbaths at the entrances to houses. Further, the outbreak of Highly Pathogenic Avian Influenza (HPAI) that began in December 2014 in the U.S. was detected in 211 commercial flocks, which are primarily exclusively indoor operations. HPAI was detected in 21 backyard flocks which generally provide ample outdoor access.⁴¹

AMS agrees with FDA that porches are not outdoor space. They do not provide contact with soil nor align with consumer expectations and NOSB recommendations for outdoor access. Codifying the allowance of porches as outdoor space in organic production would not address the wide disparity in outdoor access provisions within this sector. This disparity leads to consumer confusion about husbandry practices and places some producers at a competitive disadvantage, and thus would not meet the OFPA's intent to assure consumers that organically produced products meet a consistent and uniform standard. AMS is concerned that allowing porches as the sole area for outdoor access could erode consumer demand for organic eggs and lead to an exodus of consumers and producers for other labeling programs. Furthermore, allowing porches to be considered as part of an outdoor area would not substantially mitigate the estimated costs associated with the proposed rule. In comparison to the land area needed for outdoor access, porches cover a small portion, so a producer would still need to provide access to land that extends beyond the porch area.

AMS also considered allowing awnings or overhangs which extend from poultry houses to count as outdoor areas. However, the distinction between an awning versus a porch could be confusing and present enforcement challenges. Given the controversy with the use of porches, AMS intends that the regulations clearly prohibit porches or a similar structure from being used as outdoor space. *Implementation period.* AMS also considered different implementation periods of three, five and ten years for the outdoor access and outdoor stocking density requirements for poultry in this proposed rule. In determining the length of an implementation period, we considered cost mitigation and the urgency of

consumer expectations. For cost mitigation, we reviewed the depreciation rate and timeframe for layer houses. The NAHMS 2013 Layers study collected the age of houses on organic operations with layers: Nearly 40 percent were nine years old or less. AMS determined that the weighted average age of aviary houses is 7.6 years by using the midpoint of each survey bracket (*i.e.*, less than 5 years; 5–9 years; 10–19 years) and the percent of operations in that bracket.⁴² The OEFA survey reported that the average depreciation rate for layer houses among respondents was 12.5 years.⁴³ The difference between the depreciation rate (12.5 years) and average age of organic aviary layer houses (7.6 years) is roughly 5 years. Therefore, a 5-year implementation period would allow organic egg producers, on average, to recover the costs of a poultry house. At that point, structural changes necessitated by this rule would align with scheduled maintenance or new construction.

While we expect that organic egg producers will bear a greater cost burden for this proposed rule, this implementation period should also align with upgrades or new construction for broiler houses. We note that 15 percent of broiler houses generally are 5 years old or less and have a depreciation rate of 15 years.⁴⁴ While organic broiler houses are likely to be newer on average, given that the NOP was not established until 2002, we anticipate that the majority of organic broiler houses would be nearing the end of useful life when this rule is implemented.

AMS also considered a three 3-year implementation period. This timeframe

⁴² AMS understands there was 39 percent increase in the number of organic layers between 2013 and 2015 (3.2 million additional organic layers), the highest increase since this information was collected starting in 2007. While we expect that additional aviary houses may have been constructed to house the increase in the number of layers, we did not factor that into the average age estimate. If new organic aviary houses began operation in 2013–2015, this would lower the average age of organic aviaries.

⁴³ The OEFA survey asked, "What is the depreciation rate (as reported on Federal tax Schedule F forms) of your poultry houses in years?"

⁴⁴ This reflects the percentage of broiler houses in the U.S., not specific to organic operations that were 15 years old or less in 2006. We applied that proportion to this analysis because the population of broilers has grown since that time, so houses that were older than 15 years are likely to have been upgraded or renovated in the interim. This data was reported in MacDonald, James M. *The Economic Organization of U.S. Broiler Production*. Economic Information Bulletin No. 38. Economic Research Service, U.S. Dept. of Agriculture, June 2008. The depreciation rate was reported in the Organic Egg Farmers of America Survey conducted in July 2014 and cited above.

would align with the 3-year period that is required to transition land to organic production if there have been applications of prohibited substances (§ 205.202(b)).⁴⁵ We believe that three years would not provide sufficient time for producers who need to expand the outdoor access areas to acquire additional land and potentially convert that land to organic production. We estimate that 45 percent of organic egg production may need additional land to meet the outdoor access requirements. This short timeframe would impose an unduly immediate cost burden and deter producers from exploring options to remain in organic egg production, potentially causing a sharp reduction in the supply of organic eggs.

Conversely, a 10-year implementation period could erode consumer demand for organic eggs if the organic label requirements do not keep pace with growing consumer preferences for more stringent outdoor living conditions. Prolonging the disparity in organic egg production practices and the resulting consumer confusion would be detrimental to the numerous organic egg producers who could readily comply with this proposed rule. They would continue to operate at a competitive disadvantage to operations which provide less outdoor access and have greater feed efficiencies and lower mortality rates.

A 5-year implementation period would make these requirements more feasible for a greater portion of organic egg producers while keeping the organic label competitive in regards to animal welfare claims. We believe the 5-year period would coincide with the timing for retrofitting poultry houses in the majority of organic operations, regardless of this rule.

AMS is requesting comment on the above assumption. Specifically, AMS requests comments on:

- The age of poultry houses used for organic egg production.

Consumer and Producer Responses as Drivers of Benefits and Costs

Connections between costs and benefits, on the one hand, and potential producer and consumer responses, on the other, are set out in the table below.

⁴⁵ Section 205.202(b) of the USDA organic regulations requires that land from which harvested crops will be represented as organic must have had no prohibited substances, as listed in § 205.105, applied to it for a period of 3 years immediately preceding harvest of the crop. Further, organic livestock are required to have organically produced feed (§ 205.237(a)).

⁴¹ USDA APHIS reports and data can be found at the following site: https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian-influenza-disease/tut/p/z1/04_iUIDg4tKPAF/ABpSA0fpReYllmemJJZn5eYk5-hH6kVFm8XGzu4GFiaGPu6uLoYGjh6Wnt4e5mYG7mam-l76UfjVFGQHKglAz0VrTQ!!/.

Consumer, producer responses	Impacts
<p>Producers change their practices to meet the new, more stringent organic standards; consumers continue consuming organic agriculture products.</p> <p>Producers discontinue (or avoid newly achieving) organic certification; consumers switch from products meeting existing organic standards to non-organic versions of similar products.</p> <p>Producers discontinue (or avoid newly achieving) organic certification; consumers switch to dissimilar products.</p>	<p>Costs: Incremental cost of producing to new, more stringent organic standards, relative to existing organic standards.</p> <p>Benefits: Incremental credence benefits of consuming products produced according to new, more stringent organic standards, relative to existing organic standards.*</p> <p>Cost savings: Incremental savings of producing with non-organic practices, relative to existing organic standards</p> <p>Benefits (reduced): Incremental credence benefits of consuming products produced according to non-organic practices, relative to existing organic standards.*</p> <p>Impacts (may be positive or negative): Incremental production costs, incremental credence benefits, incremental non-credence attributes.</p>

*The price premium that consumers are willing to pay for certified organic products correspond to benefits, as that term is used for purposes of analysis under Executive Orders 12866 and 13563, only if organic production practices yield real improvements in areas such as animal welfare, human health or environmental outcomes.

Benefits of the Proposed Rule

This proposed rule would bring specificity and clarity to the regulations relating to animal welfare practices for organic livestock and poultry and address the persistent requests to AMS for further standards on living conditions for organic livestock and poultry. Greater clarity and specificity will foster the uniform application of the practice standards in organic production, animal transport, and slaughter. This, in turn, will maintain consumer confidence driving organic purchases. Organic products cannot be distinguished from non-organic products based on appearance; consumers rely on process verification methods, such as certification to a uniform standard, to ensure that organic claims are true. For this reason, organic products have been described as “credence goods” in the economics literature.^{46,47} Credence goods have properties that are difficult to detect, both before and after purchase. Organic livestock products are an example of a “credence good” for which consistent verification to a common production standard across the sector supports continued consumer confidence. Ensuring the stability of consumer confidence in the organic livestock sector can also protect the confidence in the organic label generally.

Consumers are increasingly interested in the treatment of animals raised for food, as evidenced by the proliferation of animal welfare certification labeling claims. This proposed rule would

ensure that organic producers are equally competitive in this market and would alleviate the need to pursue additional certification to communicate the use of strict animal welfare practices to consumers. The existing animal welfare certification programs have varying requirements, even within individual programs, creating a range of standards in the marketplace.⁴⁸ For example, these programs may include standards for pastured, cage-free and free-range production. However, high participation rates among organic livestock and poultry producers in these third-party animal welfare certification programs indicates that the organic label does not provide the level of information consumers need to assess whether a specific brand meets their expectations for animal welfare practices. We expect that private animal welfare certification labels on organic products serve as supplementary information that provides consumers with assurance of certain product attributes, such as minimum space requirements, which are not guaranteed through organic certification. Consumers who purchase these doubly certified products would likely not be satisfied with private animal welfare certification alone because organic certification addresses other unique attributes they seek, e.g., animals receive only organic feed.

Establishing clear practice standards for organic products which meet or exceed most of the private animal welfare certification requirements would foster a more efficient market for organic products. Narrowing the range of acceptable practices within organic egg production would bolster consumer

confidence in the information conveyed by an organic label claim on these products. As the requirements in this proposed rule would meet or exceed most of the private animal welfare certification standards, we expect that producers would find organic certification sufficient and reduce participation in other certification programs. This would streamline the business practices of organic livestock producers by reducing redundant and duplicative paperwork and verification processes for organic certification and a separate animal welfare certification.

Several studies show a correlation between consumer preferences/demand for products associated with higher animal welfare standards and higher price premiums. We believe these studies may be applicable in predicting consumer behavior in the organic egg market, particularly for consumers who regularly purchase organic eggs. Sustained consumer demand for organic eggs could mitigate some costs associated with this rulemaking and incentivize producers to comply with this proposed rule and remain in the organic market.

A study by Heng (2015) examined whether consumers are willing to pay a premium for livestock products associated with improved animal welfare.⁴⁹ The results identified the basic living needs of hens (including providing outdoor access) as the most important factors for their welfare. The estimates also indicated that on average consumers placed a higher value on animal welfare issues than on potential environmental issues in their egg choices. In addition, the estimated Willingness to Pay (WTP) parameters suggested that consumers were willing to pay a premium in the range of \$0.21

⁴⁶ Caswell, Julie A. and Eliza M. Mojduszka. 1996. “Using Informational Labeling to Influence the Market for Quality in Food Products.” *American Journal of Agricultural Economics*. Vol. 78, No. 5: 1248–1253.

⁴⁷ Zorn, Alexander, Christian Lippert, and Stephan Dabbert. 2009. “Economic Concepts of Organic Certification.” Deliverable 5 for Project CERTCOST: Economic Analysis of Certification Systems in Organic Food and Farming. http://www.certcost.org/Lib/CERTCOST/Deliverable/D11_D5.pdf.

⁴⁸ The Humane Farm Animal Care program has compiled a table comparing the requirements of selected third-party animal welfare certification programs for laying hens. This includes stocking density and outdoor standards. The comparison table is available at: <http://certifiedhumane.org/how-we-work/fact-sheet/>.

⁴⁹ Yan Heng, “Three Essays on Differentiated Products and Heterogeneous Consumer Preferences: The Case of Table Eggs” (Ph.D. diss., Kansas State University, 2015).

to \$0.49 per dozen. Such premiums could serve as an incentive for farmers to pursue a labeling claim that signifies improved animal welfare practices.

Another study by Heng et al., (2013) estimated the values of certain attributes of eggs, including outdoor access and stocking density.^{50 51} This study included a survey to assess general perceptions of animal welfare. Respondents with favorable perceptions of pro-animal welfare products rated cage-free and outdoor access as more important factors affecting egg quality than adjusting stocking density or not inducing molting.⁵² WTP parameters revealed that 89 percent of respondents in one cohort were willing to pay a premium of \$0.25 per dozen for eggs from hens given outdoor access; 11% of those respondents were not willing to pay a premium for outdoor access.⁵³ These findings support AMS' decision to essentially keep indoor stocking rates consistent with current practices and focus on parity among organic egg producers for meaningful outdoor access. We believe that organic consumers generally have high regard for animal welfare-friendly products. Therefore, we expect that focus on parity will resonate positively with consumer preferences for definitive outdoor access practices for organic

⁵⁰ Yan Heng, et al., (2013). Consumer Attitudes toward Farm-Animal Welfare: The Case of Laying Hens. *Journal of Agricultural and Resource Economics* 38(3):418–434.

⁵¹ The study used 2 levels for outdoor access: Access or none. The study used three levels for stocking density: 67 square inches per bird (United Egg Producers standards); 138 square inches (average space needed for hens to fully stretch their wings) and 1.5 square feet (third-party animal welfare standards, e.g., Certified Humane and Animal Welfare Approved).

⁵² Respondents were asked whether they agreed that food products produced in an animal-friendly environment are: From healthier and happier farm animals, healthier for humans, better quality, better for the environment, and taste better.

⁵³ Respondents in this study were provided with additional information about potential environmental consequences of different management practices to understand how environmental concerns could influence consumers' valuation of layer management practices. The additional information suggested that cage-free and outdoor access systems could contribute to poorer air quality and use more energy to regulate temperatures. The \$0.25 premium was measured among the group that had the environmental information. We believe this group is more descriptive of organic consumers generally because their purchases are driven by some awareness of production practices underlying the organic claim. The mean premium among respondents without that information was \$0.16 for hens given outdoor access. Because the willingness-to-pay distributions for more outdoor access and space shifted positively with the additional information on potential environmental impacts of different housing systems, the study noted that consumer concerns for animal welfare issues surmount environmental concerns.

layers. Further, it will be associated with a willingness to pay a premium for more consistency and transparency in how this practice is implemented.

Sumner et al., (2011) looked at the potential market impacts of shifting egg production from caged housing to alternative noncage systems.⁵⁴ The authors note that the analysis could be extended to other alternatives such as free-range and pasture-based production. While not focusing on organic eggs, these results are illustrative of the impacts of mandated housing changes on supply and demand for eggs.⁵⁵ The research concludes that farm price increases of 40 percent for eggs would likely reduce consumption by less than 10 percent. The authors note that in the U.S., egg consumption is relatively unresponsive to price change and egg expenditures are a very small share of the consumer budget. Based on other research, the study surmised that consumers are willing to pay more for animal welfare-related attributes (e.g., ample space per hen, safe outdoor access) when they have more information about the housing systems. These results support the expectation for consumer willingness to pay for eggs perceived to be produced using alternative housing. We believe that the space and outdoor access requirements in this proposed rule would enable consumers to better differentiate the animal welfare attributes of organic eggs and maintain demand for these products.

Chang et al., (2010) examined prices for eggs with various labels about production (e.g., cage-free, free-range, organic) to assess how consumers value certain product attributes.⁵⁶ This study noted that price premiums for cage-free and free-range eggs are 56.7 percent and 87.5 percent higher, respectively, than conventional egg prices (the price premium for organic over conventional was 85 percent). Free-range eggs are distinguished from cage-free, for the purposes of this study, by the provision of outdoor access for the laying hens in

⁵⁴ D.A. Sumner, et al., "Economic and Market Issues on the Sustainability of Egg Production in the United States: Analysis of Alternative Production Systems" (Paper presented as part of the Poultry Science Association Emerging Issues: Social Sustainability of Egg Production Symposium, Denver, Colorado, July 11–15, 2010).

⁵⁵ Specifically, this study looks at four parameters: Price elasticity of demand; willingness to pay for price increases for eggs produced under alternative housing systems; price elasticity of supply; and, change in the marginal per unit cost of production due to shifting to an alternative housing.

⁵⁶ Chang, Jae Bong, et al., (2010). The Price of Happy Hens: A Hedonic Analysis of Retail Egg Prices. *Journal of Agricultural and Resource Economics* 35(3):406–423.

free-range systems.⁵⁷ This data demonstrates that consumers value living conditions that reflect improved animal welfare for hens, even more so when the birds are able to go outdoors. Using predicted prices, this study further estimates what portion of the price premium can be attributed to egg color versus production practice. The study found that 58 percent and 64 percent of the price premium is attributed to production practice rather than egg color for cage-free and organic eggs, respectively. Consumers of organic eggs appear willing to pay higher premiums for production practices than consumers of other types of eggs. We believe these findings could be persuasive in an organic egg producer's decision to comply with this proposed rule in order to remain in the organic market.

In addition, informal national surveys reveal consumer expectations that organic eggs are produced from hens with outdoor access. A 2014 Consumer Reports Labeling Survey noted that 55 percent of consumers believe that the organic label on meat and poultry means that the animals went outdoors.⁵⁸ Further, the survey measured that 72 percent of consumers believe the organic label should mean that the animals went outdoors. A second survey, designed by the American Society for the Prevention of Cruelty to Animals, showed that 63 percent of respondents believe that organic livestock have access to pasture and fresh air throughout the day and 60 percent believe that organic livestock have significantly more space to move than non-organic animals.⁵⁹ This proposed rule would align consumer expectations and the production practices required to make an organic label claim regarding animal welfare for poultry.

We expect that clear, consistent requirements for avian living conditions can sustain consumer demand and support the growth in the market for organic poultry products. Several articles describe a positive association between the establishment of uniform regulation of product labels and consumer confidence. Van Loo, et al, (2011) asserts that uniform organic standards and certification procedures are essential to maintain consumer trust

⁵⁷ The study notes that organic production requires that hens be given outdoor access and concludes that free-range can be synonymous with organic.

⁵⁸ Consumer Reports National Research Center, Food Labels Survey, 2014. Nationally representative phone survey of 1,004 adult U.S. residents.

⁵⁹ This phone survey was administered to 1,009 adults in October 2013.

in the validity of organic labels and willingness to pay for such products.⁶⁰ They found that the magnitude of consumers' willingness-to-pay for organic chicken breast depended on the type of organic label: A 35 percent premium for general organic labeled chicken breast versus a 104 percent premium for a chicken breast labeled as USDA certified organic. Smith (2009), states that governmental regulatory oversight of credence-type claims, such as "organic," can facilitate the availability of improved information on food quality, deter irresponsible practices and provide a mechanism to prosecute violations.⁶¹ Smith also observes that governmental standards can address the market failure connected to uncertainty about product quality and prevent consumer deception and fraud. The prevalent participation among organic poultry producers in private animal welfare certification programs demonstrates that the organic certification does not provide the quality assurances that consumers expect for animal welfare attributes. Adding specificity to the USDA organic regulations for poultry living conditions would fill that void and add stability to a market sector that has widely varying production characteristics.

In accordance with OMB Circular A-4, the benefits of this proposed rule are the real improvements in attributes (*e.g.*, animal welfare) for organic poultry products. Several recent consumer surveys gauge consumer understanding of the meaning of the organic label with respect to outdoor access. These surveys show that a higher proportion of respondents believe that organic poultry should have outdoor access than the percent which believe that organic poultry do have outdoor access.

To monetize the benefits, AMS is using previous research that has measured that consumers are willing to pay between \$0.21 and \$0.49 per dozen eggs for outdoor access.⁶² AMS

estimates the benefits by multiplying the low (\$0.21), mid (\$0.35) and high (\$0.49) points of that range by the projected number (in dozens) of organic eggs produced by layers that are estimated to newly have outdoor access as a result of this rule being implemented.⁶³ The National Animal Health Monitoring Survey (NAHMS) reports that 36 percent of organic egg operations surveyed currently provide at least 2 square feet per bird (equivalent to 2.25 lbs/ft²) of outdoor space and 35 percent of hens have outdoor access via a porch system or covered area; we do not know what percentage of total organic egg production this represents, so we calculate benefits using a range from 35 percent at the lower bound to 64 percent (= 100% - 36%) at the upper bound, and request comment on how to refine this aspect of the analysis.⁶⁴ AMS estimates that the annual benefits would thus range between \$14.7 million to \$62.6 million annually with a mean value of \$34.6 million over a 13 year period.⁶⁵ ⁶⁶ The estimated benefits would not begin to accrue until the rule is fully implemented beginning in year 6 (the proposed implementation period is 5 years).

Costs of Proposed Rule

AMS considered various alternatives for the stocking density and outdoor space provisions for organic egg production. AMS also considered how these producers might respond to the proposed stocking densities and outdoor access requirements and how this would impact the supply and demand for organic eggs. AMS did not quantify costs associated with some of the

⁶³ AMS projects that the number of organic eggs produced when this rule is fully implemented will be 324,374,484 dozen. The organic egg supply projections are discussed in the costs section below.

⁶⁴ For the estimated costs, we assume that 45% of organic layers do not comply with the proposed outdoor access requirements and will newly have outdoor access under the proposed requirements. This is consistent with the estimated range of organic poultry production that would newly have access to the outdoors, which is used to calculate benefits.

⁶⁵ The 13 year period accounts for the time needed to fully depreciate layer houses. We use a 13 year timeframe to align with the methodology used to calculate the costs, below. The 13-year average includes five years of zero benefits, reflecting the five years before compliance with the new, more stringent standard is required, and eight years of positive benefits.

⁶⁶ If there were a decrease in animal welfare associated with producers switching from the baseline level (considered organic under the current standard) to the level provided under the cage-free standard, a necessary next step in the benefits calculation would be subtraction of the monetized decline in welfare. However, given AMS's understanding of management practices, the agency believes that there would be no such decline in animal welfare associated with switching label claims from organic to cage-free.

alternatives discussed above (*e.g.*, requiring the outdoor areas to accommodate a certain percent of the flock, whether or not porches can be considered outdoor space), but we discuss the potential impacts of different choices with respect to those options. We do not expect the mammalian health care and living conditions sections, transportation, or slaughter provisions to impose additional costs, as we expect that these sections will largely codify existing industry practices. Therefore, we do not project costs for the implementation of those provisions. However, AMS is requesting comments on any impacts of those proposed requirements to check that assertion.

Assumptions—Layers

To estimate the costs to comply with minimum indoor and outdoor space requirements for organic layers, AMS made assumptions about the current facilities and practices for organic egg production. AMS is proposing indoor stocking requirements that align with the current practices in organic egg production. Table 5 provides the proposed indoor stocking rates by housing type. AMS is aware that many organic egg producers participate in third-party animal welfare certification programs, in particular, the Certified Humane label program.⁶⁷ The proposed indoor stocking rates for layers match the standards for the Certified Humane certification program which has ample organic producer participation across various operation sizes and housing types. Therefore, we believe that most organic egg producers could comply with the proposed indoor stocking rates with minor or no changes to their current operation.

The Humane Farm Animal Care standards⁶⁸ for egg laying hens specify minimum indoor and outdoor space requirements for four types of housing systems: Pasture-based (where birds have unlimited access to pasture and

⁶⁷ The Organic Egg Farmers of America (OEFA) survey reported that 87 percent of organic egg production is also certified to private animal welfare standards. The survey results do not indicate which animal welfare certification programs organic egg producers participate in, but AMS is aware that the Certified Humane label is a common choice.

⁶⁸ Producers who meet the Humane Farm Animal Care (HFAC) standards, as verified through an application and inspection, may use the Certified Humane Raised and Handled logo. Participants are inspected and monitored by Humane Farm Animal Care. The minimum indoor and outdoor space requirements cited here are published in the 2014 HFAC Standards for Production of Egg Laying Hens. They are available at: <http://certifiedhumane.org/how-we-work/our-standards/>. Accessed July 7, 2015.

⁶⁰ Van Loo, Ellen J., Caputo, Vincenzina, Nayga Jr., Rodolfo M. (2011). Consumers' willingness to pay for organic chicken breast: Evidence from choice experiment. *Food Quality and Preference*, 22(2011), 603–613.

⁶¹ Smith, G. (2009). "Interaction of Public and Private Standards in the Food Chain", OECD Food, Agriculture and Fisheries Working Papers, No. 15, OECD Publishing. Retrieved from <http://search.proquest.com/docview/189840535?accountid=26357>.

⁶² Some quantity of organic egg production is diverted to processed foods. Applying the outdoor access price premium for table/shell eggs—which is captured in Table 2—to organic eggs used in processed foods introduces some uncertainty into the benefits analysis; therefore, we request comment on consumers' willingness-to-pay for outdoor access for hens laying eggs used in organic processed foods.

low outdoor stocking density, approximately 40 ft² per bird); loose-housing systems, which include floor

litter and slatted/mesh floor systems (both single-story houses) and aviaries (multi-level platforms and perches).

AMS also estimated the distribution of organic production among the housing types as shown in Table 5.

TABLE 5—U.S. ORGANIC LAYERS BY HOUSING TYPE

Housing system	Baseline minimum indoor space (ft ² per bird)	Percent of U.S. organic laying flock
Pasture housing	1.0	10
Floor litter housing	1.5	10
Slatted/mesh floor housing	1.2	30
Aviary housing	1.0	50

In this analysis, the outdoor space is the key constraint that drives the costs of complying with the proposed rule; we are proposing an outdoor stocking density of a maximum of 2.25 pounds/ft² for layers. Many organic poultry producers currently provide an outdoor stocking density of 2.25 pounds/ft² for layers. For these producers the proposed maximum outdoor stocking density will not pose additional costs. AMS assumes that layer operations have the equivalent of two layer house footprints of outdoor space available for each house. We considered that the land available for outdoor access could be the areas between and alongside of the houses and extending from the ends of the houses. For this analysis, we assumed that pasture housing, floor litter housing and slatted/mesh floor housing systems collectively account for 50 percent of organic egg production and either currently comply with the outdoor space requirements or have the land available to comply with the proposed outdoor stocking rate without significant changes to the number of birds or facilities. AMS is not assuming that all of these operations currently provide outdoor access for layers at the proposed stocking density, but that they have the space available to do so. Therefore, these operations could incur costs for fencing, installing more exits, and other measures to make the area usable as outdoor space.

In addition to the above assumptions, a few producer survey results are notable. The National Animal Health Monitoring Survey (NAHMS) reports that 36 percent of organic egg operations surveyed provide at least 2 square feet per bird (equivalent to 2.25 lbs/ft²) of outdoor space and 35 percent of hens have outdoor access via a porch system or covered area. We do not know what percentage of total organic egg production this represents. The EIC survey reports that 15.5 percent of all organic layers have at least 2.0 ft² outdoors and access to soil; the OEFA

survey, reports that 59 percent of organic layers reportedly have at least 2.0 ft² outdoors.

In this analysis, AMS postulates that a producer will consider two options in response to this proposed rule: (1) Comply with the proposed rule and remain in the organic egg market; or (2) transition to the cage-free egg market. Using those potential responses, AMS constructed two scenarios to project how the organic egg sector would behave and estimated the costs for each scenario. This section explains the assumptions and variables used to build our estimates.

AMS constructed enterprise budgets for representative organic egg operations by housing type (*i.e.*, pasture housing, slatted floor/mesh, floor litter housing, aviary housing).⁶⁹ For each representative operation, we identified a baseline cost structure which included estimated fixed and variable costs to determine the cost to produce one dozen eggs. We then made assumptions about how and if these values would change under the proposed rule. The fixed and variable costs are listed in Table 6.

⁶⁹ This analysis mirrors the cost estimation methodology used by Vukina, et al., to prepare a cost analysis for the National Organic Program on implementing the National Organic Standards Board recommendations on stocking densities and outdoor access for organic poultry. Vukina et al., developed the baseline cost structure by interviewing organic layer and broiler producers and using existing literature. We have used most of their assumed values for fixed and variable costs in this analysis. The results of that analysis were reported in the following articles: Tomislav Vukina, et al., “Economic effects of proposed changes in living conditions for laying hens under the National Organic Program,” *Journal of Applied Poultry Research* 23 (1) (March 2014): 80–93. Accessed February 5, 2016. doi:10.3382/japr.2013–00834. Also, Tomislav Vukina, et al., “Proposed changes in living conditions for broilers under the National Organic Program will have limited economic effects,” *Journal of Applied Poultry Research* 23 (2) (June 2014): 233–243. Accessed February 5, 2016. doi:10.3382/japr.2013–00896.

TABLE 6—FIXED AND VARIABLE COSTS FOR ENTERPRISE BUDGET

Fixed costs:
House
Composter
Equipment—total
Cooler
Generator
Outdoor space (Veranda, land, plus fencing and cover)
Organic Certification
Insurance (0.5% of the value of the assets)
Property tax (0.8% of the value of the assets)
Variable costs:
Pullets
Feed
Wood Chips
Utilities
Labor
Process and Packaging Fee
Manure cleanout
Miscellaneous

To complete the cost estimates for complying with the proposed rule, AMS employed the following basic assumptions and values:

- Simple linear (straight line) depreciation of assets with zero salvage value.
- Annual opportunity cost of capital of 3 percent.
- Homogenous labor hired at \$13.25 per hour.⁷⁰
- Price variability for inputs, *e.g.*, feed, pullets, according to the size of the flock.⁷¹

⁷⁰ Labor costs were estimated using data obtained on hourly wages for farming, fishing, and forestry occupations published by the Bureau of Labor Statistics for states with high concentrations of organic broiler and egg production. We calculated an average hourly wage rate using wage rates from eight states—California, Iowa, Massachusetts, Michigan, New York, North Carolina, Oregon, and Pennsylvania—resulting in an average hourly wage rate of \$13.25. Organic certification costs were calculated as the average of California Certified Organic Farmers (CCOF) and Iowa Organic Certification Program posted fees for each organic production sales range category.

⁷¹ AMS used the following estimates for birds placed per cycle to calculate costs for the representative operation for each housing type: Aviaries—100,000 birds; slatted/mesh floor and floor litter—16,000 birds; pastured—15,000 or less.

- Feed costs per ton of \$574 (\$710 for pasture operations).
- Lay rate (eggs/hen/year) of 308 (284 for pasture operations).
- Feed conversion rate of 4.0 pounds per dozen.⁷²
- Operations can purchase additional land if needed.
- Annual rental rate per acre of land of \$177.⁷³
- Building costs of \$70 per hen.⁷⁴

AMS assumed that the mortality rate for hens would increase to 8 percent from 5 percent if this proposed rule is finalized.⁷⁵ The increased mortality would chiefly be attributed to increased predation, disease and parasites from greater outdoor access. Many organic producers already provide outdoor access that would comply with this proposed rule and would not see changes in mortality.

The proposed changes to the avian living conditions, particularly outdoor access, reflect the input of numerous stakeholders, including producers and consumers, on production practices that would improve the overall quality of life for birds. The NOSB also recognized mortality rates as a key indicator of animal welfare and important to the economic viability of an operation. In addition, the NOSB has discussed specific practices to prevent and manage predation and disease in a production environment where outdoor access is an integral part. These include predator deterrents (electrified fencing, overhead netting), rotation of land, well-drained

⁷² AMS estimates increased feed costs per bird due to increased energy expenditure outdoors. We project the feed conversion rate will move from the baseline 3.8 pounds per dozen to 4.0 pounds per dozen.

⁷³ Prices for land were constructed based on average real estate values for farm land per acre in 2014 (National Agricultural Statistics Service [NASS], 2014). Land prices were calculated as the average of the published land prices in the top five states for organic egg production. The prices for land in New York, Massachusetts, Michigan, North Carolina, and California were averaged to obtain a land price of \$5,884 per acre. The annual rental rate was obtained by multiplying the value of land with the 3 percent interest rate, resulting in an annual rate of \$177 per acre.

⁷⁴ This includes poultry houses, pullet housing, processing equipment and infrastructure improvement, but does not include costs to construct a new feed mill. These costs are based on information from organic egg producers for existing housing costs.

⁷⁵ The National Animal Health Monitoring Survey Layers 2013, reports that about half of organic egg producers have a 60-week mortality of less than 4 percent. About 20 percent of organic egg producers have a 60-week mortality of 7 percent or higher. For the 10 percent of operations (pastured) which we expect already comply with the proposed requirements, AMS uses an estimated baseline mortality rate of 10 percent. We do not expect that the proposed requirements would affect that rate for these types of operations that currently provide ample outdoor access.

soil, lower stocking density, and selection of breeds that are suited to free range conditions.⁷⁶ While the tradeoff between a higher mortality rate for greater outdoor access generally reflects the preferences of the organic community, organic producers will be required to use practices to effectively minimize mortality and correct excessive and preventable loss.

The key factors that influence the enterprise budgets—and magnitude of the impacts to operations—are feed conversion rates, production volume and cost of land. Under the proposed rule, feed is the variable cost that would shift most notably. The cost of feed would increase due to lower feed conversion as birds expend more energy outdoors.⁷⁷ Lower feed conversion plus higher mortality would ultimately reduce production volume, relative to the baseline with the same number of birds.

In regards to land, AMS assumes that single-story housing systems (pasture, floor litter and slatted/mesh floor housing), have the land area to meet the outdoor stocking density for their current production. Aviary operations would require a larger land area for outdoor access than other housing types because these are multi-level structures that hold more birds than single-story poultry houses. We assume that aviaries have an indoor space roughly three times larger than the footprint of the barn. Therefore, aviary houses would on average require the equivalent of six house footprints of outdoor space to meet the minimum outdoor space requirement.⁷⁸ Therefore, AMS assumes that aviaries have the land base to accommodate 33 percent of current production at the proposed outdoor stocking rates and would need to acquire additional land. AMS calculates that an aviary operation would need an additional 3 acres of land per 100,000 birds.

In summary, the marginal cost to produce one dozen eggs would increase under the proposed rule for each type of housing system except pasture. For floor litter and slatted/mesh floor housing, AMS estimates the marginal costs to

⁷⁶ At its September 2012 meeting, the NOSB discussed a guidance document for assessing animal welfare of poultry. This included a description of management practices that support animal welfare and a target mortality rate of 3 to 5 percent.

⁷⁷ In the enterprise budget, some of the variable costs (labor, processing and packaging fee) would decline slightly under the proposed rule.

⁷⁸ Aviaries generally have two to four levels; for this analysis we chose the midpoint—three levels. Aviaries, while more prevalent in larger scale egg operations, are also used for small and mid-size egg laying operations.

produce one dozen eggs would increase by 2.8%; for aviary systems those marginal costs would increase by 3.3%. The section below discusses how these costs to individual operations will impact the organic egg sector.

AMS is seeking comment on the accuracy of the estimates concerning the available land base for outdoor access and the other assumptions made in the cost analysis. Is the two house footprints of outdoor space per layer house a valid baseline assumption? How many aviaries, and what proportion of organic egg production, have available outdoor space to comply with the proposed outdoor stocking density?

Assumptions—Broilers

This proposed rule contains indoor and outdoor space requirements specific to broiler and other meat-type avian species. Similar to organic egg production, AMS expects that the space requirements for broilers are the provisions that would have cost implications. This proposed rule, consistent with the NOSB recommendation, would set a maximum of 5.0 lbs/ft² for indoor and outdoor stocking density for broilers. According to the OEFA survey, 100 percent of responding broiler operations participate in private, third-party animal welfare certification. In order to estimate the potential costs to comply with the stocking density, AMS made the following key assumptions:

- AMS expects that 75 percent of organic broiler production complies with the proposed stocking densities.⁷⁹ We assume that 25 percent of organic broiler production meets a maximum of 6.5 lbs/ft², for the indoor stocking density. That metric is based on third-party animal welfare certification programs which have high participation rates among organic operations.⁸⁰ For

⁷⁹ The OEFA survey, representing 62 percent of organic broilers, asked organic poultry producers whether they could comply with a 2.0 ft²/bird outdoor stocking density. According to the survey, 75 percent of organic broilers production could not meet that stocking density. However, this proposed rule would set the stocking density at 5.0 lbs/ft². Given that the average live weight for organic chicken is 5.84 lbs, the survey effectively asked whether broilers could comply with a 2.9 lbs/ft² stocking density. Since that is significantly more stringent than the proposed stocking density, we expect that the percent of organic broiler production which could comply is considerably higher. Further, in the Economic Impact Analysis of Proposed Regulations for Living Conditions of Organic Poultry, Vukina et al., concluded that the representative organic broiler operation provided a 4.275 lbs/ft² and could meet the 5.0 lbs/ft² indoor stocking density.

⁸⁰ The 6.5 lbs/ft² is the midpoint indoor stocking density between the Humane Farm Animal Care standards for broilers (maximum 6.0 lbs/sq²) and

this analysis, we use 5.37 lbs/sq ft, indoors and outdoors, to represent the baseline stocking density for organic broilers generally. This is the weighted average of the range of current practices based on the assumptions described above.

- Operations which can meet the proposed indoor stocking density can also meet the outdoor stocking density. We expect that the land area around a broiler house is equivalent to the footprint of two broiler houses. Since broilers are not housed in multi-level aviaries like laying hens, the outdoor space could accommodate the same number of birds at the indoor stocking density.⁸¹

- The current, annual organic broiler production is roughly 16 million birds and the average live weight of organic broilers at slaughter is 5.84 pounds.⁸²

- An organic broiler house will have 6 production cycles per year; each cycle is 6–8 weeks long.⁸³

In addition, we applied the same assumptions for layers, specifically mortality rates, depreciation of assets, property tax, labor, insurance, etc., to the cost estimates for broilers.

Cost Estimate for Organic Egg and Poultry Production

AMS assumes that in response to this proposed rule, affected producers will make operational changes to comply

with the proposed rule and continue organic egg and poultry production. The projected net returns shown in Table 7 support this projection; under the proposed rule the net returns for organic eggs will exceed the net returns of selling to the cage-free market. Table 7 shows the difference in net returns per 100,000 dozen eggs for organic eggs under the current USDA organic regulations and the proposed rule, and for cage-free eggs. The net returns vary based on housing systems, *i.e.*, aviary and single-storyhouses.

TABLE 7—COMPARISON OF NET RETURNS BY LABEL CLAIM⁸⁴

Label claim	Net return (\$)—Aviaries	Net return (\$)—Single-story houses
Certified Organic—Current Baseline	26,482	21,190
Certified Organic (as proposed)—	19,779	14,109
Cage-Free	7,262	949

^a All values in table are per 100,000 dozen eggs.

AMS assumes that producers would maintain their current level of production (*i.e.*, the same number of layers) and would seek additional land to meet the proposed outdoor stocking density. The estimated total costs for the organic egg sector are the sum of increased operating expenses and reduced production. AMS is calculating the costs over a 13-year timeframe. AMS believes that during this period, existing organic layer houses would fully depreciate. AMS understands that producers may have other assets, such as land, feedmills, equipment, which are integral to their organic operation and will not have fully depreciated during the 13-year period. We have tied the costs to the house because this investment requires the most capital.

The methodology just described reflects an assumption that costs accrue only to legacy organic producers. As example for which this assumption seems plausible, consider a producer with a fairly new house, located in a spot without open land; such a producer

would likely choose to switch to cage-free eggs until the time when the house gets close to needing replacement, and then might build the new house at a location spacious enough to allow for organic production. The costs (*i.e.*, consumer and producer surplus losses of cage-free relative to organic) associated with this type of case would decrease over time. For this reason, the lower bound cost estimates presented below decline linearly over time, with estimates approaching zero by year 14. On the other hand, a cost category such as increased bird loss due to predation is an inherent aspect of conformance to the proposed higher organic standard; it will not decline to zero at any point in the future. The upper bound cost estimates presented below, for which estimates (other than the upfront land expenditure of \$1.1 million) are the same from one year to the next, reflect an assumption that this type of cost is predominant.

There are no outdoor space costs for the first five years because layer

operations would not be required to make any changes to the outdoor space during that time period.

As discussed above, the operating expenses for most organic egg operations will increase chiefly due to higher feed costs, because of decreased feed efficiency, and the purchase of additional land. There may be added costs for maintenance of outdoor areas (*e.g.*, fencing); however we have not quantified these costs due to wide variability in site-specific conditions. The one-time expenditure for the purchase of additional land is projected to be about \$1.1 million for the organic egg sector.

The reduced volume of eggs going to the market due to higher mortality and decreased lay rate and feed conversion, all associated with more outdoor access, will also lower net returns. In Table 8, AMS estimated how the proposed rule would affect total egg production while holding the layer numbers constant for each housing type.

the American Humane Association standards for broilers (maximum 7.0 lbs/sq²).

⁸¹ Vukina et al., also assumed for their analysis that the representative broiler producer is in a position to buy or lease one acre of additional land to expand outdoor access and meet the proposed stocking density.

⁸² The AMS Livestock, Poultry and Grain Market News Report, Weekly USDA Certified Organic

Poultry and Eggs, is available at: <http://www.ams.usda.gov/market-news/organic-market-news-reports>. AMS Market News reported that 16 million organic broiler chickens were slaughtered under Federal Inspection in 2014.

⁸³ A 6 week production cycle is more common.

⁸⁴ The net return estimates use the following data values/sources: (1) Wholesale value of organic eggs

(\$2.64/dozen) and wholesale value of cage-free eggs (\$1.65/dozen). These are the values reported to AMS Market News for Free on Board organic and cage-free eggs in June 2015. (2) We assumed that 20% of the eggs would go the breaker egg market priced at \$1.00/dozen. This is the price reported to AMS Market News in 2015.

TABLE 8—PROPOSED RULE IMPACT ON ORGANIC EGG PRODUCTION BY HOUSING TYPE

Housing type	Difference in total egg production after rule (percent decrease) ^a
Pasture	No change.
Floor litter	1.5
Slatted/mesh floor	1.5
Aviary	1.5

^aAMS estimated how the proposed rule would affect total egg production while holding the layer numbers constant for each housing type.

For the organic egg sector, AMS estimates that the costs of this proposed rule will average \$6 to \$17 million annually. The compliance costs that would occur in year 1 if the entire industry had to comply (and each other year, for the upper bound estimates) is \$28.2M. For the lower bound estimates, in each year, compliance costs decline by 1/13 until they reach zero in 2014. No costs are incurred during the first 5 years due to the 5 year implementation period for outdoor space requirements. By year six, 5/13ths of the layer barns will have been fully depreciated based on federal tax returns. Thus, the lower bound compliance costs incurred are reduced by 5/13ths (\$10.8 million) to exclude all compliance costs from the barns which are fully depreciated prior to implementation of the outdoor space requirements. Lower bound costs reported are reduced by 1/13th each additional year until costs reported would reach \$0 in year 14.

For this analysis, AMS assumes that organic broiler producers would also

maintain their current facilities and reduce the number of birds, if needed, in order to comply with the proposed stocking densities and remain in the organic market. In this scenario, producers would incur some increased expenditures, linked to increased feed costs and reduced feed efficiency, and reduced production. In addition, AMS estimates that the organic broiler flock (16 million birds) would be reduced by 7 percent, or 1.18 million birds to comply with the proposed indoor stocking density. Estimated costs to producers in each of the years after compliance with the rule is required will exceed the projected annual average. For the lower bound, AMS is reducing the actual costs (e.g., lost revenue) from lower production by 1/13th each year throughout the 13-year period.⁸⁵ In summary, the total costs AMS is reporting for organic broiler production is estimated to average between \$3.4 and \$6.8 million annually.

The compliance cost would be in the first year (year 1) if the entire industry had to comply. For the lower bound, costs are reduced by 1/13 of that cost every year until they reach zero in year 14. No costs are incurred during the first year due to the 1 year implementation period for indoor access requirements. By the 2nd year, costs reported are reduced by 1/13th (\$563,000) to \$6.8

⁸⁵ It is not standard practice to categorize lost revenue as a cost in a society-wide cost-benefit analysis. Instead, costs should be calculated as lost producer and consumer surplus (that is, the difference between the amount consumers would be willing to pay for the relevant consumption units and the marginal cost of producing those units, summed across the units that are no longer traded in the market). We request comment that would allow for revision of the analysis along these lines.

million because 1/13th of the barns will have fully depreciated. Costs reported are reduced by 1/13th each additional year until costs reported would reach \$0 in year 14.

In summary, the total reported costs for the organic egg and poultry sector are estimated to average \$9.5 to \$24.1 million annually. AMS estimates that the increased operating costs and lost revenue from decreased production volumes would result in a 3.63 percent increase in the break-even price for one dozen organic eggs (\$2.31 to \$2.39 per dozen). AMS expects that some organic egg and broiler producers may face additional costs for building new fences, providing shade in outdoor areas, or creating more doors in poultry houses. We have not quantified these costs due to the wide variability in baseline conditions and potential changes based on the suitability to site-specific conditions.

Table 9. Estimated costs for organic egg and poultry sector – full compliance.

Year	Broilers	Layers	Total
1	\$7,324,000 ^a	\$28,160,000	\$0
2	\$6,760,000 to \$7,324,000	\$25,994,000 to \$28,160,000	\$6,760,000 to \$7,324,000
3	\$6,197,000 to \$7,324,000	\$23,828,000 to \$28,160,000	\$6,197,000 to \$7,324,000
4	\$5,633,000 to \$7,324,000	\$21,662,000 to \$28,160,000	\$5,634,000 to \$7,324,000
5	\$5,070,000 to \$7,324,000	\$19,495,000 to \$28,160,000	\$5,070,000 to \$7,324,000
6	\$4,507,000 to \$7,324,000	\$17,329,000 to \$28,160,000	\$21,836,000 to \$35,484,000
7	\$3,944,000 to \$7,324,000	\$15,163,000 to \$28,160,000	\$19,107,000 to \$35,484,000
8	\$3,380,000 to \$7,324,000	\$12,997,000 to \$28,160,000	\$16,377,000 to \$35,484,000
9	\$2,817,000 to \$7,324,000	\$10,831,000 to \$28,160,000	\$13,648,000 to \$35,484,000
10	\$2,253,000 to \$7,324,000	\$8,664,000 to \$28,160,000	\$10,918,000 to \$35,484,000
11	\$1,690,000 to \$7,324,000	\$6,498,000 to \$28,160,000	\$8,189,000 to \$35,484,000
12	\$1,127,000 to \$7,324,000	\$4,332,000 to \$28,160,000	\$5,459,000 to \$35,484,000
13	\$563,000 to \$7,324,000	\$2,166,000 to \$28,160,000	\$2,730,000 to \$35,484,000
13 year average	\$3,380,000 to \$6,761,000	\$6,086,000^b to \$17,329,000	\$9,466,000 to \$24,090,000
TOTAL	\$43,943,000 to \$87,888,000	\$79,115,000 to \$225,280,000	\$123,059,000 to \$313,168,000

^a The amounts in the shaded areas were not included in the totals because producers would not need to comply with the rule during these years. They are provided here to show how the costs were calculated. The values listed in year 1 are the full compliance costs for broilers in year 2 (when the rule becomes effective) and layers in year 6 (after the implementation period). For the lower bound estimates, these amounts were reduced by 1/13th each year.

^b This includes a one-time land cost of \$1.1 million which was not depreciated.

Impact of Egg Operations Leaving Organic Production

Alternatively, some organic egg operations may consider leaving organic production for the cage-free market. AMS estimates that up to 90 percent of organic aviaries may transition to cage-free egg production due to marketing opportunities and challenges of complying with the outdoor space

requirements.⁸⁶ Our assumptions about land availability, described above, and the projected net returns for organic

⁸⁶ AMS based this assumption on a review of Organic System Plans for organic egg operations which have more than one level of living space and at least 16,000 hens. We set this criteria to capture aviaries. We reviewed 62 OSPs to visually gauge whether the land area adjacent to the houses could be sufficient to comply with the proposed outdoor stocking density.

eggs and cage-free eggs informed our prediction of how organic producers may respond. We expect that 90 percent may overestimate that proportion of egg production that might exit the organic market and seek data to refine this estimate.⁸⁷ The estimated 90 percent of

⁸⁷ For clarification, "exit" is used in this analysis to indicate that producers would leave the organic

organic aviaries that do not have the land available would need to reduce the number of birds to meet the proposed stocking density. That reduced production volume would result in significant net loss and would not be economically viable. Therefore, we project that this production, which accounts for 45 percent of organic egg production, would likely transition to the cage-free egg market. As shown in Table 7, these producers would be able to sell their eggs as cage-free which has a lower cost of production but also lower premiums compared to the organic egg market.

For this analysis, we estimate the foregone profit as the difference in net returns for cage-free and organic eggs for a 13 year period. This accounts for the time needed to fully depreciate layer houses. Reported profit effects are decreased by 1/13th each year. We estimate that in aggregate producers who cannot comply with the reduced outdoor space requirements and move to cage free production would have reduced net revenues of \$27 million in the first year that the rule is fully implemented. However, by year six, 5/13th of these aviary layer barns would have been fully depreciated, so none of these costs incurred are included in this proposed rule. In year six, 5/13ths of actual costs are removed leaving a reported cost of \$16.6 million. Each subsequent year, an additional 1/13th of the actual costs are removed until

market but would continue to produce eggs or poultry for the conventional market.

reported profit effects reach \$0 in year 14. We estimate that the foregone profit from the transition to the cage-free egg market would total \$216 million of which AMS is reporting in this analysis \$74.1 million, averaging \$5.7 million over 13 years.⁸⁸

These profit effects encompass real costs and cost savings, such as the savings resulting from a switch from organic feed to less expensive conventional feed; however, the highest-magnitude aspect of the profit effect is very likely the non-collection of the differential price premiums for organic eggs relative to cage-free eggs. As discussed previously, consumers pay this premium largely because they place a value on laying hens having access to the outdoors. However, the exiting producers have not been giving their animals sufficient access to the outdoors, so the non-payment of these price premiums does not correspond to changes in costs (*e.g.*, the costs of providing outdoor access) or benefits (*e.g.*, the value of animal welfare) because the outdoor access availability is the same with the cage-free production option as it is in the baseline. As such, in the context of a society-wide cost-benefit analysis, the price payment effect associated with a switch to cage-free label claims—and, by extension, most of the overall net profit effect—would be categorized as a transfer of value from egg producers to egg consumers.

⁸⁸ Total costs incurred for the egg producers who move to the cage-free market are \$216 million (\$26,966,000 per year over 8 years).

To complete the estimate for this exit scenario we assume that organic egg producers, including the 10 percent of organic aviaries that do not exit to the cage-free market, have the land base to meet the proposed outdoor access requirement and will maintain organic egg production. As described in the above scenario, these producers will incur increased expenses for higher feed costs due to decreased feed efficiency and maintenance of outdoor access areas (*e.g.*, fencing). In addition, we expect that aviaries will need additional land to comply with the outdoor stocking density and will face increased annual rent for land. These organic producers would also experience reduced profits resulting from decreased lay rate and higher mortality with increased outdoor access.

Estimated costs of complying with the proposed rule, for those producers who do not transition to cage-free, will average \$6.3 to \$21.5 million annually for 13 years. Transfers associated with the switch to cage-free (by some, but not all, producers) average \$5.7 million over that time horizon. Table 10 shows how these estimated costs and transfers are distributed over 13 years. Note that the upper bound costs in the laying hens column increase over time, as producers who temporarily exited organic production in favor of cage-free expand their production space so as to allow them to satisfy the proposed higher organic standard and they thus incur higher costs (*e.g.*, due to greater predation).

Table 10. Estimated cost and transfers (foregone profit) for organic egg and poultry production – most aviaries exit.

Year	Cost: Broilers	Cost: Layers (stay in organic production)	Transfers: Layers (exiting the organic market) - reduced returns	Cost: Total
1	\$7,324,000 ^a	\$13,770,000	\$26,966,000 ^a	\$0
2	\$6,760,000 to \$7,324,000	\$12,711,000 to \$14,969,000	\$24,892,000	\$6,760,000 to \$7,324,000
3	\$6,197,000 to \$7,324,000	\$11,652,000 to \$16,168,000	\$22,817,000	\$6,197,000 to \$7,324,000
4	\$5,634,000 to \$7,324,000	\$10,592,000 to \$17,367,000	\$20,743,000	\$5,634,000 to \$7,324,000
5	\$5,070,000 to \$7,324,000	\$9,533,000 to \$18,566,000	\$18,669,000	\$5,070,000 to \$7,324,000
6	\$4,507,000 to \$7,324,000	\$8,474,000 to \$19,765,000	\$16,594,000	\$12,981,000 to \$27,089,000
7	\$3,944,000 to \$7,324,000	\$7,415,000 to \$20,965,000	\$14,520,000	\$11,359,000 to \$28,289,000
8	\$3,380,000 to \$7,324,000	\$6,355,000 to \$22,164,000	\$12,446,000	\$9,735,000 to \$29,488,000
9	\$2,817,000 to \$7,324,000	\$5,296,000 to \$23,363,000	\$10,371,000	\$8,113,000 to \$30,687,000
10	\$2,253,000 to \$7,324,000	\$4,237,000 to \$24,562,000	\$8,297,000	\$6,490,000 to \$31,886,000
11	\$1,690,000 to \$7,324,000	\$3,178,000 to \$25,761,000	\$6,222,000	\$4,868,000 to \$33,085,000
12	\$1,127,000 to \$7,324,000	\$2,118,000 to \$26,960,000	\$4,149,000	\$3,245,000 to \$34,284,000
13	\$563,000 to \$7,324,000	\$1,059,000 to \$28,160,000	\$2,074,000	\$1,622,000 to \$35,484,000
13 year average	\$3,380,000 to \$6,761,000	\$2,933,000 to \$14,746,000	\$5,744,000	\$6,313,000 to \$21,507,000
TOTAL	\$43,943,000 to \$87,888,000	\$38,133,000 to \$191,700,000	\$74,675,000	\$82,076,000 to \$279,588,000

^a The amounts in the shaded areas were not included in the totals because producers would not need to comply with the rule during these years. They are provided here to show how the costs were calculated. The values listed in year 1 are the full compliance costs for broilers in year 2 (when the rule becomes effective) and layers in year 6 (after the implementation period). These amounts were reduced by 1/13th each year.

Impact on Organic Egg Supply

AMS has also considered the impact of the proposed rule on the organic egg supply if 90 percent of organic aviaries exit the organic egg market. We are using the number of layers as an

indicator of organic egg supply. The number of organic layers grew 12.3 percent annually from 2007–2015.⁸⁹ We

⁸⁹ USDA Livestock, Poultry and Grain Market News, 2015. This is the compound annual growth rate from 2007 to 2015. The growth from one-year

expect that this growth rate will not be sustained and project that the number of organic layers will grow 2 percent

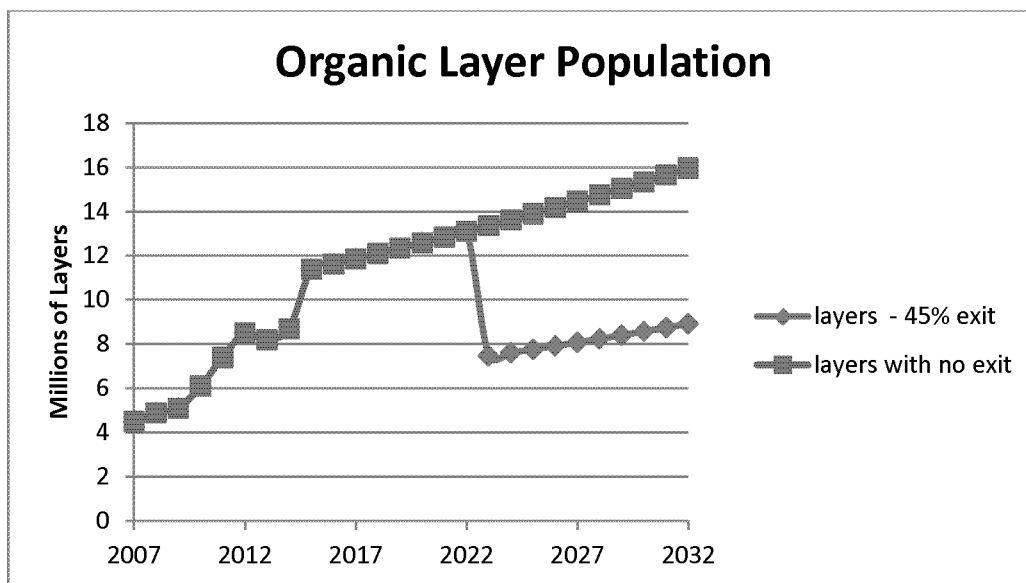
to the next could have been higher or lower than the 12.3 percent average.

annually after year 2015. The 2 percent annual growth is estimated based on the historical growth rate in the number of

nonorganic layers between 2007 to 2015.⁹⁰ Figure 1 shows the projected

growth trajectory for each producer response scenario.

Figure 1. Actual and projected growth in the organic layer population.



We estimate that up to 90 percent of organic aviaries could exit to the cage-free market. In this case, we expect that the number of layers would drop by 43 percent relative to peak production. Peak production would occur 5 years after publication of the final rule and the drop in production would occur 6 years after publication when the rule must be fully implemented. After the projected decline, AMS expects that the organic layer population would resume growth at the 2 percent annual rate. This is likely a conservative estimate as unmet consumer demand for organic eggs would be an incentive for operations to enter organic egg production and for existing organic operations to expand. Assuming that all organic producers comply with this proposed rule and maintain organic production, we expect that the number of organic layers will grow 2 percent annually throughout and after the implementation period.

AMS is proposing that the final rule, except for the avian outdoor access provisions, be implemented one year after publication. The avian outdoor access provisions would be implemented in two phases: (1) Operations/facilities/poultry houses which are initially certified 3 years after publication would need to comply with the outdoor stocking density to obtain certification; (2) All operations certified

before the 3-year mark would need to comply with the proposed outdoor stocking density 5 years after the publication of the final rule.

The increased operating expenses are projected to raise the break-even price per dozen eggs by 3.2 percent to 3.6 percent for floor housing systems and aviaries respectively. We use break-even price as a proxy for wholesale price. Based on studies, cited above, evaluating consumers' willingness-to-pay for outdoor access, we anticipate that price increases of this magnitude would not deter consumer purchases of organic eggs.

AMS acknowledges that achieving consistent organic practices is critical to maintain consumer trust in the organic sector and may necessitate that some producers leave the organic market and use alternate labeling claims. However, we expect that updating the organic livestock standards in response to consumer and producer preferences will avert widespread, adverse impacts from maintaining the status quo. Persistent consumer confusion about organic labels on eggs and other livestock products jeopardizes consumer trust in the organic label generally and undermines a key purpose for establishing a national organic certification program. In addition to constraining the performance of existing organic operations, these conditions could discourage participation in the

NOP as producers seek alternate certification to better convey their management practices to consumers.

On the other hand, organic livestock production standards that are relevant and responsive to consumer preferences should drive demand for organic products and attract new entrants to the organic livestock market. This would have positive monetary impacts for organic livestock producers and other organic operations that produce/handle animal feed. We have not quantified the potential broader implications for not pursuing this action.

Impacts on Other Entities

AMS expects that the proposed handling requirements for organic livestock, including transit and slaughter, are common industry practice and would not substantially affect producers or handlers. During the development and deliberation of the NOSB's animal welfare recommendations in 2009 and 2011, there were numerous public comments. Those comments did not inform of any substantial impacts of provisions pertaining to mammalian livestock.

USDA's Animal and Plant Health Inspection Service (APHIS) already has requirements to support animal health during transit. With regard to slaughter, USDA's Food Safety and Inspection Service (FSIS) already requires that mammalian slaughter facilities meet

⁹⁰Ibid.

similar requirements as those recommended by the NOSB, per the Humane Methods of Slaughter Act within the Federal Meat Inspection Act.

Some small mammalian slaughter facilities may not currently be inspected by FSIS; for example, those operations that sell meat intra-state only. However, AMS understands that humane slaughter practices in compliance with the Humane Methods of Slaughter Act are industry standard. AMS expects that costs incurred to comply with the proposed rule would not be a substantial barrier. Such costs could include those related to training staff, developing record-keeping materials, making minor facility renovations, and documenting and analyzing the facility's compliance with the proposed rule. Therefore, AMS does not expect that existing organic slaughter facilities would incur substantial costs or make onerous changes to current facilities or procedures in order to comply with the proposed rule.

AMS understands that it is possible that a subset of the existing certified organic slaughter facilities could surrender their organic certification as a result of this action, which could impact organic livestock producers. However, AMS cannot predict the number of such entities, if any, that would surrender organic certification and the corresponding impact to organic producers. Similarly, certain businesses currently providing livestock transport services for certified organic producers or slaughter facilities may be unwilling to meet and/or document compliance with the proposed livestock transit requirements. AMS is requesting comments specifically on the proposed regulations for slaughter.

As discussed below in the Paperwork Reduction Act section, this proposed rule would impose additional paperwork requirements. Organic livestock and poultry producers and handlers must 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 proposed rule describes the additional information (§§ 205.238, 205.239, 205.241, and 205.242) that will need to be included in a livestock operation's organic system plan in order to assess compliance. AMS estimates the annual cost to compile this information will be \$400 per organic livestock producer. AMS expects that as producers adapt to the requirements introduced by the amendments at §§ 205.238, 205.239, 205.241, and 205.242, the number of

labor hours per year for currently certified operators will decrease.

This proposed rule would also impose a minor burden on certifying agents. These entities will need to become familiar with the requirements of the proposed rule and update organic system plan forms.

AMS does not expect that this proposed rule would impose any unique cost burdens on foreign-based livestock operations that are USDA certified organic due to the extremely limited number of foreign certified poultry operations. There are less than 5 producers and handlers of USDA certified egg or chicken operations outside of the U.S. according to the NOP's Organic Integrity database. There are less than 70 USDA certified organic operations that have mammalian livestock and operation outside of the U.S.; most of these are cattle operations in Australia.

AMS did not estimate costs for impacts to third-party animal welfare certification programs. As discussed above, we expect that organic producers may opt to no longer participate in these certification programs once this proposed rule is finalized. AMS believes that these private certification programs have a participant base that is broader than organic producers and offer a unique service for producers who want to convey specific information about animal welfare practices to consumers.

Conclusions

This proposed rule will maintain consumer trust in the value and significance of the USDA organic seal, particularly on organic livestock products. Clear and consistent standards for organic livestock practices, especially maximum stocking density and outdoor access for poultry, are needed and broadly anticipated by most livestock producers, consumers, trade groups, certifying agents, and OIG. This action completes the process, as intended by OFPA and reiterated in the USDA organic regulations, to build more detailed standards for organic livestock. By resolving the ambiguity about outdoor access for poultry, this action furthers an objective of OFPA: Consumer assurance that organically produced products meet a consistent standard. In turn, it also provides assurance to producers that organic certification standards reflect the expectations of the consumer base. Augmenting the animal welfare practice standards for organic livestock would provide a foundation for efficient and equitable compliance and enforcement and facilitate fair competition among organic livestock producers. AMS is

providing a 5-year implementation period for the outdoor access provisions for poultry in consideration of the average time needed to finish depreciating the capital costs of aviary houses, production realities and cost to producers who invested in organic production facilities.

AMS is seeking comments on the economic impacts, both costs and benefits, of this action on the industry. We are specifically interested in validating the accuracy of assumptions about available outdoor space, and more precise estimates of the number and size of egg layer and broiler operations that may be affected by this action. The costs and benefits are summarized in the Executive Summary and were described in detail in this section.

B. 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 proposed rule is not intended to have a retroactive effect.

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 proposed 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.

C. Regulatory Flexibility Analysis

The Regulatory Flexibility Act (RFA) (5 U.S.C. 601–612) requires agencies to consider the economic impact of each rule on small entities and evaluate alternatives that would accomplish the objectives of the rule without unduly burdening small entities or erecting barriers that would restrict their ability to compete in the market. The purpose is to fit regulatory actions to the scale of businesses subject to the action.

The RFA permits agencies to prepare the initial RFA in conjunction with other analyses required by law, such as the Regulatory Impact Analysis (RIA). AMS notes that several requirements to complete the RFA overlap with the RIA. For example, the RFA requires a description of the reasons why action by the agency is being considered and an analysis of the proposed rule's costs to small entities. The RIA describes the need for this proposed rule, the alternatives considered and the potential costs and benefits of this proposed rule. In order to avoid duplication, we combine some analyses as allowed in section 605(b) of the RFA. The RIA explains that the scope of that analysis is the impact on the organic egg sector. AMS believes that other types of organic livestock and poultry production would not face significant costs to comply with this proposed rule because the proposed provisions generally codify current practices. As explained below, AMS expects that the vast majority of organic egg producers and broiler producers that could be impacted by this proposed rule would qualify as small businesses. In the RIA, the discussion of alternatives and the

potential costs and benefits pertain to impacts upon all entities, including small entities. Therefore, the scope of those analyses is applicable to the RFA. The RIA should be referred to for more detail.

Why is AMS proposing this rule?

The Organic Food Production Act (OFPA) provides general requirements for organic livestock production, and directs USDA to provide more detailed provisions through rulemaking. The current USDA organic regulations have broad and general requirements for ensuring the welfare of certified organic livestock and poultry. Organic livestock and poultry must be raised in a way that accommodates their health and natural behavior and reduces stress. Specifically, organic livestock and poultry producers must provide access to the outdoors, shade, clean and dry bedding, shelter, space for exercise, fresh air, clean drinking water, and direct sunlight (§ 205.239(a)). Additionally, the organic regulations describe allowed and prohibited livestock healthcare practices and specify requirements for organic livestock living conditions (§ 205.239(b)). AMS began the process of adding more specificity to the livestock provisions with the publication of the 2010 final rule on access to pasture for ruminants. This action would fulfill the expectations set forth in OFPA and anticipated by the organic community for more clarity on production practices for poultry and other livestock species.

The USDA organic regulations for livestock and poultry are general and can apply to various production situations. However, as described above, varying interpretations of these regulations have resulted in different practices, particularly concerning outdoor access for poultry. One of the main disparities in practice is the use of porches to provide outdoor access versus an uncovered area with soil and/or vegetation. This disparity in outdoor access has economic implications for the operations and jeopardizes consumer confidence in the organic label.

AMS has received formal complaints from organic poultry farmers who provide outdoor access through pasture-based systems. These operations have cited that they are at a competitive disadvantage compared to operations that are providing more limited access to the outdoors.⁹¹ To resolve this divergence in practices, the NOSB,

⁹¹ Increased outdoor access is associated with increased mortality due to predation and decreased feed efficiency.

organic trade groups, and consumer groups have pressed AMS to intervene and set clear guidelines regarding outdoor access, minimum space requirements, and other livestock and poultry provisions. With this proposed rule, AMS is proposing more specific requirements for organic livestock and poultry, including specific minimum indoor and outdoor space requirements for organic poultry, and provisions for handling during transportation and slaughter. These proposed requirements are largely based on recommendations from the NOSB which were developed with substantive input from stakeholders, including producers and consumers. In the RIA, AMS explains that the outdoor access requirements for poultry are expected to have cost impacts for organic egg and broiler producers. Therefore, this analysis focuses on those production sectors. The other proposed requirements for mammalian living conditions, healthcare practices and handling during transport and slaughter would essentially codify existing practices and are not considered in this analysis. The scope of the analysis is also explained in the RIA.

Consumers have become increasingly interested in how their food is produced and make purchasing decisions based on the method of production. Based on public comments received in response to the NOSB's recommendations on animal welfare, AMS understands that consumers expect, and are willing to pay more for, animal welfare requirements that are more stringent than conventional products. This includes outdoor access for organic poultry. AMS believes that the costs incurred by producers in complying with this proposed action are necessary to reflect consumer expectations for organic products. If implemented, this action would, as discussed in the benefits portion of the RIA, support consumer expectations related to practices for organic livestock. AMS believes that the long-term economic impact of not implementing this proposed rule could undermine the integrity of the USDA organic seal, if there is ambiguity regarding how the USDA organic regulations must be applied across the organic livestock and poultry sector.

Would I be affected by the rule?

AMS has considered the economic impact of this proposed action on small entities. Small entities include avian and mammalian livestock producers and slaughter facilities that currently hold or are considering certification to the USDA organic regulations, as well as

organic certifying agents. While the proposed action would affect all operations involved in the production, handling, and certification of organic livestock, AMS believes that the cost of implementing the proposed rule will fall primarily on current and prospective organic egg and broiler producers, including: (1) Individuals or business entities that are considering starting a new egg or poultry operation and that plan to seek organic certification for that operation, (2) existing egg and broiler producers that plan to seek organic certification for that operation, and (3) existing egg and broiler producers that are currently certified organic under the USDA organic regulations.

The RFA requires, with some exception, that AMS define small businesses according to its size standards. The Small Business Administration (SBA) sets size standards for defining small businesses by number of employees or amount of revenues for specific industries. These size standards vary by North American Industry Classification System (NAICS) code (13 CFR part 121.201). For the RFA

analysis, AMS focused on estimating how different size organic layer and broiler operations (small versus large) would be impacted as a result of meeting the proposed indoor and outdoor space requirements.

AMS does not expect that the proposed rule would substantially affect other stakeholders, including (1) operations that produce other organic poultry, (2) operations that produce mammalian livestock, (3) operations that handle organic livestock, and (4) organic certifying agents. These determinations are based on a number of assumptions described below and explained in the RIA. This analysis focused on the impact of the proposed rule on small businesses in the United States.

What are the estimated costs for organic layer operations?

Small egg producers are listed under NAICS code 112310 (Chicken Egg Production) as grossing less than \$15,000,000 per year. AMS estimates that out of 722 operations reporting sales of organic eggs, 4 exceed that threshold.⁹² However, we estimate that

large producers account for 25 percent of organic egg production.

The availability of adjacent land for egg laying operations to meet the proposed outdoor access requirements is the main determinant of costs to implement this rule. AMS projects that organic egg and broiler producers would be able to meet this proposed rule with only modest costs. We assume that these producers have or can acquire adequate outdoor space to meet the proposed outdoor stocking density. For these producers, the increased costs are due primarily to increased mortality, reduced feed efficiency associated with increased outdoor access, maintenance of outdoor areas (e.g., fencing) and for broilers, reduced number of birds to meet the indoor stocking density.⁹³ The reported cost estimates for this scenario are provided in the RIA in Table 9. We project the reported costs would total \$4.5 million for small layer operations and \$1.5 million for large layer operations. Per operation, we estimate the total annual cost would be slightly over \$6,000 for small operations and \$380,000 for large operations.⁹⁴

TABLE 11—ESTIMATED COSTS FOR ORGANIC LAYER OPERATIONS BASED ON SIZE

	Small operations (less than \$15 million in sales)	Large operations (\$15 million or more in sales)
Reported costs annualized over 13 years (million)	\$4.56	\$1.52
Average, 13 year annualized reported cost per operation	6,350	380,000

AMS recognizes that the reported costs exclude the majority of compliance costs current organic layer operations will face. For organic layers operations, the compliance costs incurred will be \$21.12 million each year after implementation for small operations and \$7 million each year after implementation for large operations. Each small layer operation will incur compliance costs of \$29,400 each year after implementation and each large layer operation will incur compliance costs of \$1.76 million each year after implementation.

AMS expects that the costs to comply with the proposed outdoor space requirements would be more burdensome for larger organic layer producers and would increase the

likelihood for these operations to transition to a cage-free label. Since nearly all of the organic producers qualify as small businesses, we expect that there is considerable variation in the size of operations in this category. These operations would require significantly more land and would be less likely to have that area available for expansion.

As previously stated, however, producers could choose to surrender their organic certification and move to alternate labels such as cage-free, which would reduce both their annual profits and their annual operating costs. AMS estimated the cost for the potential scenario in which 90 percent of organic aviary operations transition to the cage-free market in response to this proposed

rule. Because aviary houses hold more birds, these operations will require a larger land base to comply with the outdoor stocking density. Therefore, we expect that any operations would which exit the organic egg market would not qualify as small businesses per SBA criteria. AMS estimates that if a 100,000-dozen-egg, aviary facility transitioned from the current USDA organic regulations to the cage-free label, the operation would, on average, have reduced annual profits (\$7,262 versus \$26,482).

Organic Broiler Producers

Small chicken producers are listed under NAICS code 11230 (Broilers and Other Meat Type Chicken Production) as grossing less than \$750,000 per year. According to the NASS special

⁹² The National Agricultural Statistics Service's 2014 Organic Survey provides the number of farms reporting sales of organic eggs and those reporting sales of organic broilers. AMS requested a special tabulation from NASS to obtain the number of organic egg and organic broiler operations which

exceed the Small Business Administration sales criterion for small businesses in each of these production categories.

⁹³ Due to increased mortality, producers may need to have more birds to offset the losses. In addition, birds may expend more energy with

increased outdoor access requiring more feed per bird.

⁹⁴ The per operation totals are calculated using 722 as the total number of organic layer operations; 718 qualify as small and 4 qualify as large per the SBA size standards.

tabulation, AMS estimates that 27 of the 245 operations reporting sales of organic broilers would not qualify as small

businesses. AMS estimates that the large businesses represent 25 percent of the organic broiler market. AMS reports that

the proposed indoor and outdoor space requirements would impose average costs of \$3.4 million per year.

TABLE 12—ESTIMATED COSTS FOR ORGANIC BROILER OPERATIONS BASED ON SIZE

	Small operations (less than \$750,000 in annual sales) ^a	Large operations (over \$750,000 in annual sales)
Reported costs annualized over 13 years	\$2.53 million	\$845,000
Average, 13 year annualized, reported cost per operation	11,600	31,300

AMS recognizes that the reported costs exclude the majority of compliance costs current organic broiler operations will face. For organic broiler operations, the compliance costs incurred will be \$5.5 million each year after implementation for small operations and \$1.8 million each year after implementation for large operations. Each small layer operation will incur compliance costs of \$25,200 each year after implementation and each large layer operation will incur compliance costs of \$68,000 each year after implementation.⁹⁵

Would other organic livestock producers and handlers be substantially affected?

Based on available data, AMS does not expect that other organic livestock producers and handlers would be substantially affected by this proposed action. As explained in the RIA, we expect the proposed provisions for mammalian living conditions and health care practices, and handling and transport to slaughter, would codify existing industry practices. These determinations are based on a series of assumptions described below.

Organic Mammalian Livestock Producers

AMS believes the proposed clarifications for organic mammalian livestock, including provisions related to animal treatment and physical alternations, are common industry practice and would not have a substantial impact on such producers. AMS previously addressed major living condition changes for ruminant livestock in its final rule, Access to Pasture (Livestock) (75 FR 7154, February 17, 2010).

⁹⁵ The per operation totals are calculated using 245 as the total number of organic layer operations; 218 qualify as small and 27 qualify as large per the SBA size standards.

Organic Livestock Handling Operations

Based on available information, AMS understands that, in practice, all handling operations for organic livestock are small businesses. We expect that the proposed handling requirements for organic livestock, including transit and slaughter, are common industry practice and would not substantially affect handlers. USDA’s Animal and Plant Health Inspection Service (APHIS) already has requirements to support animal welfare during transit. AMS understands that the proposed additional requirements related to transit are of industry standard. Also, operations providing transit services for organic livestock are not required to be certified to the USDA organic standard. Therefore, while operations providing transit services would need to comply with the proposed transit requirements, they would not be directly subject to additional certification requirements.

Both small livestock slaughter facilities (NAICS code 311611) and poultry slaughter facilities (NAICS code 311615) are defined as those grossing less than \$500,000,000 per year. AMS understands that most of the approximately 114 U.S.-based livestock slaughter facilities certified to the USDA organic regulations are small businesses. With regard to slaughter, USDA’s Food Safety and Inspection Service (FSIS) already requires that mammalian slaughter facilities meet similar requirements as those recommended by the NOSB, per the Humane Methods of Slaughter Act within the Federal Meat Inspection Act. Some small mammalian slaughter facilities may not currently be inspected by FSIS; for example, those operations that sell meat intra-state only. However, AMS understands that humane slaughter practices in compliance with the Humane Methods of Slaughter Act are industry standard. In addition, some small poultry slaughter facilities which are exempt from FSIS inspection already observe the good commercial practices that

would align with the Poultry Products Inspection Act and FSIS regulations. AMS expects that costs incurred to comply with the proposed rule would not be a substantial barrier. Such costs could include those related to training staff, developing record-keeping materials, making minor facility renovations, and documenting and analyzing the facility’s compliance with the proposed rule. Therefore, AMS does not expect that existing organic slaughter facilities would incur substantial costs or make onerous changes to current facilities or procedures in order to comply with the proposed rule.

AMS understands that it is possible that a subset of the existing certified organic slaughter facilities could surrender their organic certification as a result of this action, which could impact organic livestock producers. However, AMS cannot predict the number of such entities, if any, that would surrender organic certification and the corresponding impact to organic producers. Similarly, certain businesses currently providing livestock transport services for certified organic producers or slaughter facilities may be unwilling to meet and/or document compliance with the proposed livestock transit requirements.

What is the impact for organic certifying agents?

This proposed rule would also affect certifying agents that certify organic livestock operations. The Small Business Administration (SBA) defines small agricultural service firms, which includes certifying agents, as those having annual receipts of less than \$7,500,000 (North American Industry Classification System Subsector 115—Support Activities for Agriculture and Forestry). There are currently 79 USDA-accredited certifying agents; based on a query of the NOP certified organic operations database, there are approximately 41 certifying agents who are currently involved in the certification of organic livestock

operations. AMS believes that these certifying agents would meet the criterion for a small business, though some are agencies of state governments. While certifying agents are small entities that will be affected by this proposed rule, we do not expect these certifying agents to incur substantial costs as a result of this action. Certifying agents must already comply with the current regulations, *e.g.*, maintaining certification records for their clients. Their primary new responsibility under this proposal would be to determine if organic livestock producers are meeting the requirements proposed in this rule, including but not limited to the minimum indoor and outdoor space requirements for organic poultry.

How would the proposed implementation period affect small businesses?

Minimum Outdoor Space Requirements

AMS understands that, based on the analysis above, both small and large organic layer operations and broiler operations may incur costs in order to comply with the proposed minimum indoor and outdoor space requirements. While our analysis demonstrates that large poultry operations would have significantly higher compliance costs than small operations on average, we understand that small producers are closer to the 245,000-hen threshold or the 150,000 broiler threshold may still incur substantial costs to comply with the proposed rule. Therefore, AMS is seeking to reduce the economic burden to organic producers, including small businesses, without unduly delaying the improved animal conditions.

AMS is proposing a 5-year implementation period for the minimum outdoor space requirements for poultry. A facility which is certified before 3 years after publication of the final rule would have 5 years to come into compliance. Producers and poultry houses which are not certified prior to 3 years after publication of the final rule would need to meet all of the requirements in order to obtain organic certification. Such new operations and poultry houses would include: (1) all poultry houses that first became certified organic 3 years or more after the final rule was published; and (2) new or replacement poultry houses operated by existing organic layer operations if such facilities were built 3 years or more after the final rule was published.

By providing an implementation period, both large and small existing organic producers would have additional time to implement the

necessary changes in order to comply with the proposed rule. For example, operations choosing to expand will need land for the outdoor space. This new land would need to be certified organic before organic poultry could have access to it. Since land that has been treated with a prohibited substance in the past 3 years is not eligible for organic certification, the implementation period would allow organic producers to transition additional land to organic production. The 5-year implementation is based upon our estimate that the average age of an organic layer house is 7.6 years and has depreciated over 13 years for tax purposes. Therefore, a 5-year implementation period would allow organic egg producers, on average, to recover the costs of a poultry house. While we expect that organic egg producers will bear a greater cost burden for this proposed rule, this implementation period should also align with upgrades to or new construction for broiler houses. We expect that 15 percent of broiler houses generally are 5 years old or less and have a depreciation rate of 15 years.⁹⁶ While organic broiler houses are likely to be newer on average, given that the NOP was not established until 2002, we anticipate that the majority of organic broiler houses would be nearing the useful life of the broiler house when this rule is implemented.

All Other Requirements

For all other provisions of the proposed rule, AMS is proposing an implementation date of one year after the publication of the final rule. AMS chose a one-year period because all livestock and slaughter operations will need to change their Organic System Plans (OSPs) to meet the proposed requirements. During the one-year implementation period, certifying agents would need to update their OSP forms and make modifications to their certification processes in order to evaluate compliance with the proposed new requirements. This would include training staff and inspectors. AMS believes one year is adequate for organic

⁹⁶ This reflects the percentage of broiler houses in the U.S., not specific to organic operations that were 15 years old or less in 2006. We applied that proportion to this analysis because the population of broilers has grown since that time, so houses that were older than 15 years are likely to have been upgraded or renovated in the interim. This data was reported in MacDonald, James M. *The Economic Organization of U.S. Broiler Production*. Economic Information Bulletin No. 38. Economic Research Service, U.S. Dept. of Agriculture, June 2008. The depreciation rate was reported in the Organic Egg Farmers of America Survey conducted in July 2014 and cited above.

operations, including for small businesses, to implement these changes.

Do these requirements overlap or conflict with other federal rules?

AMS has not identified any relevant Federal rules that are currently in effect that duplicate, overlap, or conflict with this proposed rule. AMS has reviewed rules administered by other Federal agencies, including APHIS and FSIS, and revised the proposed rule to avoid duplication. This action provides additional clarity on the animal welfare requirements for organic livestock that are specific and limited to the USDA organic regulations.

D. Executive Order 13175

This proposed 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 has 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.

E. Paperwork Reduction Act

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 119,957 hours for the reporting and recordkeeping requirements contained in this proposed 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 proposed 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-NEW.

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, and 205.242 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 the proposed rule, organic livestock operations would be subject to additional reporting requirements. The amendments to §§ 205.238, 205.239, 205.241, and 205.242 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, outdoor access and utilize 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 proposed rule would not impose a different recordkeeping burden on certifiers.

Reporting and recordkeeping are essential to the integrity of the organic certification system. A clear paper trail is a critical tool to verify that practices meet the mandate of OFPA and the USDA organic regulations. This information supports the AMS mission, program objectives, and management needs by enabling us to assess the efficiency and effectiveness of the NOP. The information affects decisions because it is the basis for evaluating compliance with OFPA and USDA organic regulations, and for administering the NOP, management decisions and planning, and establishing the cost of the program. 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 has identified three types of entities (respondents) that would 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: (1) The number of respondents; (2) the hours they spend, annually, completing the paperwork requirements of this labeling program; and, (3) the costs of that activity.

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 77 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, and 205.242.

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 organic system plans. AMS estimates the annual collection cost per certifying agent will be \$3,000.94. This estimate is based on an estimated 91.8 labor hours per year at \$32.69 per hour for a total salary component of \$3,000.94 per year. This value is assumed to be an underestimate as the certifier bears a portion of the burden of the inspector and certifiers employ varying numbers of inspectors. The source of the hourly rate is the National Compensation Survey: Occupational Employment and Wages, May 2014, published by the Bureau of Labor Statistics. The rate is the mean hourly wage for compliance officers. This classification was selected as an occupation with similar duties and responsibilities to that of a certifying agent.⁹⁷

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. Certified operations will 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

⁹⁷ 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 2014, 13-1041 Compliance Officers.

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 average (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 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 \$6,731.37. This estimate is based on an estimated 321 additional labor hours per year at \$20.97 per hour for a total salary component of \$6,731.37 per year. The source of the hourly rate is the National Compensation Survey: Occupational Employment and Wages, May 2014, published by the Bureau of Labor Statistics. The rate is the mean hourly wage for agricultural inspectors (occupation code 45–2011).

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 transport or transform aquaculture products 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 proposed rule describes the additional information (§§ 205.238, 205.239, 205.241, and 205.242) 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 5 years (§ 205.103(b)(3)).

AMS used the NOP 2014 List of Certified Operations to estimate the number of livestock operations that would be affected by this proposed action. On that basis, AMS estimates that 4,177 currently certified foreign and domestic livestock operations who will be subject to the amendments at §§ 205.238, 205.239, 205.241, and 205.242.⁹⁸ To estimate the number of livestock operations that will apply for and become certified, AMS assumed that the proportion of livestock operations to all operations will be consistent with that as reported in information collection 0581–0191. On that basis, AMS estimates there will be 59 operations that will apply for certification and become certified organic livestock producers or handlers.

AMS estimates the annual collection cost per organic livestock producer to be \$400.19. This estimate is based on an estimated 11.47 labor hours per year at \$34.89 per hour for a total salary component of \$400.19 per year. AMS estimates that as producers adapt to the requirements introduced by the amendments at §§ 205.238, 205.239, 205.241, and 205.242, the number of labor hours per year for currently certified operators will decrease. The source of the hourly rate is the National Compensation Survey: Occupational Employment and Wages, May 2014, published by the Bureau of Labor Statistics. The rate is the mean hourly wage for farmers, ranchers and other agricultural managers (occupation code 11–9013). 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. AMS also recognizes that operators bear a portion of the cost burden for the inspection which varies between certifiers.

Reporting Burden

Estimate of Burden: Public reporting burden for the collection of information is estimated to be 22 hours per year.

Respondents: Certifying agents, inspectors and livestock operations.

Estimated Number of Respondents: 4,438.

Estimated Number of Responses: 39,021.

Estimated Total Annual Burden on Respondents: 95,781 hours.

Total Cost: \$2,767,692.

Recordkeeping Burden

Estimate of Burden: Public recordkeeping burden is estimated to be

an annual total of 5.12 hours per respondent.

Respondents: Certifying agents and livestock operations.

Estimated Number of Respondents: 4,719.

Estimated Total Annual Burden on Respondents: 24,176 hours.

Total Cost: \$843,498.

Comments: AMS is inviting 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 are 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.

Comments that specifically pertain to the information collection and recordkeeping requirements of this action should be sent to Paul Lewis Ph.D., Director Standards Division, National Organic Program, USDA–AMS–NOP, Room 2642–So., Ag Stop 0268, 1400 Independence Ave. SW., Washington, DC 20250–0268 and to the Desk Officer for Agriculture, Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, 725 17th Street NW., Room 725, Washington, DC 20503. Comments on the information collection and recordkeeping requirements should reference the date and page number of this issue of the **Federal Register**. All responses to this notice will be summarized and included in the request for OMB approval. All comments will become a matter of public record. The comment period for the information collection and recordkeeping requirements contained in this proposed rule is 60 days.

F. Civil Rights Impact Analysis

AMS has reviewed this proposed 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 has

⁹⁸NOP 2014 List of certified USDA organic operations. Available on the NOP Web site, <http://apps.ams.usda.gov/nop/>.

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 proposed rule 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 proposed to be amended as follows:

PART 205—NATIONAL ORGANIC PROGRAM

■ 1. The authority citation for 7 CFR part 205 continues to read:

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”, “Mulesing”, “Outdoors”, “Perch”, “Pullet”, “Roost”, “Soil”, “Stocking density”, and “Toe clipping” in alphabetical order to read as follows:

§ 205.2 Terms defined.

* * * * *

Beak trimming. The removal of the curved tip of the beak.

* * * * *

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 the beak tip.

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. The flat space or platform area which is under a solid roof. On each level the animals have access to food and water and may be confined if necessary. Indoor space for avian species includes, but is not limited to:

(1) *Pasture housing.* A mobile structure for avian species with 70 percent perforated flooring.

(2) *Aviary housing.* A fixed structure for avian species which has multiple tiers/levels with feed and water on each level.

(3) *Slatted/mesh floor housing.* A fixed structure for avian species which has both a slatted floor where perches, feed and water are provided over a pit or belt for manure collection; and litter covering the remaining solid floor.

(4) *Floor litter housing.* A fixed structure for avian species which 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 way from the anus to the hock to prevent fly strike.

* * * * *

Outdoors. Any area in the open air with at least 50 percent soil, outside a building or shelter where there are no solid walls or solid roof attached to the indoor living space structure. Fencing or netting that does not block sunlight or rain may be used as necessary.

* * * * *

Perch. A rod or branch type structure that serves as a roost and allows birds to utilize vertical space in the house.

* * * * *

Pullet. A female chicken or other avian species being raised for egg production that has not yet started to lay eggs.

* * * * *

Roost. A flat structure over a manure pit that allows birds to grip with their toes as they would on a perch.

* * * * *

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 unit of land at any one time.

* * * * *

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

* * * * *

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

§ 205.238 Livestock health care practice 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, protein 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 or hygiene of the animals, or for identification purposes or safety. Physical alterations, if used, must be performed on livestock at a reasonably

young age, with minimal stress and pain by a competent person.

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

(ii) The following practices must not be performed on a certified operation: de-beaking, de-snooding, caponization, dubbing, toe trimming of chickens, toe trimming of turkeys unless with infrared 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 must employ best management practices 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.

(9) Ammonia levels in poultry houses must be less than 25 parts per million indoors. When ammonia levels in poultry houses exceed 10 parts per million, an operation must implement additional practices to reduce the ammonia levels below 10 parts per million.

(b) When preventive practices and veterinary biologics are inadequate to prevent sickness, an operation may administer synthetic medications allowed under § 205.603. 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.

(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.

(3) Synthetic medications may be administered in the presence of illness or to alleviate pain and suffering: Provided, that such medications are allowed under § 205.603.

(c) An organic livestock operation must not:

(1) Sell, label, or represent as organic any animal or edible 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 having withholding time cannot be sold as organic but may be fed to their own offspring. Milk from animals undergoing treatment with prohibited substances cannot be sold as organic or fed to organic livestock.

(2) Administer any animal drug in the absence of illness or to alleviate pain or suffering; with the exception of vaccinations and other veterinary biologics.

(3) Administer hormones for growth promotion, production or reproduction.

(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.

(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; blow to the head by blunt instrument; 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 health and natural behavior of animals, including:

(1) Year-round access for all animals to the outdoors, soil, 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 in a manner that maintains all animals in a good body condition. 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) Animals must be kept clean during all stages of life with the use of appropriate, clean, dry bedding, as appropriate for the species. When roughages are used as bedding, they must be organically produced and handled in accordance with this part by certified operations except as provided in § 205.236(a)(2)(i).

(4) Shelter designed to allow for:

(i) Sufficient space and freedom to lie down in full lateral recumbence, turn around, stand up, fully stretch their limbs without touching other animals or the sides of the enclosure, 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) 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 under the following conditions:

(i) Until weaning, providing 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.

(ii) Dairy young stock shall be group-housed after weaning.

(iii) Dairy young stock over six months of age shall have access to the outdoors at all times including access to pasture during the grazing season, except as allowed under paragraph (c) of this section.

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

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

(ii) Boars.

(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) Exercise areas for swine, whether indoors or outdoors, must permit rooting, including during temporary confinement events.

(11) In confined housing with stalls, at least one stall must be provided for each animal in the facility at any given time. A cage must not be used as 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.

(12) At least 50 percent of outdoor access space must be soil, except when conditions threaten the soil or water quality, outdoor access without soil must be provided temporarily.

(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.

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*. 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 from 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) *General requirement*. An organic poultry operation must establish and maintain year-round poultry living conditions which 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; adequate outdoor space to escape from predators and 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) All birds must be able to move freely, and engage in natural behaviors.

(2) Ventilation must be adequate to prevent build-up of ammonia. Ammonia levels must not exceed 25 parts per million. Operations must monitor ammonia levels monthly. When ammonia levels exceed 10 parts per million, operations must implement additional practices to reduce ammonia levels below 10 parts per million.

(3) For layers and mature birds, artificial light may be used to prolong the day length up to 16 hours. 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) The following types of flooring may be used in shelter for avian species:

(i) Mesh or slatted flooring under drinking areas to provide drainage.

(ii) Houses, excluding pasture housing, 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.

(iii) Litter must be provided and maintained in a dry condition.

(5) Poultry houses must have sufficient exit areas, appropriately distributed around the building, to ensure that all birds have ready access to the outdoors.

(6) Flat roosts areas must allow birds to grip with their feet. Six inches of perch space must be provided per bird. Perch space may include the alighting rail in front of the nest boxes. All birds must be able to perch at the same time except for multi-tiered facilities, in which 55 percent of birds must be able to perch at the same time. Facilities for species which do not perch do not need to have perch or roost space.

(7) For layers, no more than 2.25 pounds of hen per square foot of indoor space is allowed at any time, except:

(i) *Pasture housing*. No more than 4.5 pounds of hen per square foot of indoor space.

(ii) *Aviary housing*. No more than 4.5 pounds of hen per square foot of indoor space.

(iii) *Slatted/mesh floor housing*. No more than 3.75 pounds of hen per square foot of indoor space.

(iv) *Floor litter housing*. No more than 3.0 pounds of hen per square foot of indoor space.

(8) For pullets, no more than 3.0 pounds of pullet per square foot of indoor space is allowed at any time.

(9) For turkeys, broilers and other meat type species, no more than 5.0 pounds of birds per square foot of indoor space is allowed at any time.

(10) All birds must have access to scratch areas in the house.

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

(c) *Outdoor space requirements*. (1) 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 (train) birds to go outdoors.

Outdoor areas must have suitable enrichment to entice birds to go outside. Birds may be temporarily denied access to the outdoors in accordance with paragraph (d) of this section.

(2) Exit areas must be designed so that more than one bird can exit at a time and all birds in the house can exit within one hour.

(3) For layers, no more than 2.25 pounds of bird per square foot of outdoor space is allowed at any time.

(4) For pullets, no more than 3.0 pounds of pullet per square foot of outdoor space is allowed at any time.

(5) For turkeys, broilers and other meat type species, no more than 5.0 pounds of bird per square foot of outdoor space is allowed at any time.

(6) Space that has a solid roof overhead and is attached to the structure providing indoor space is not outdoor access and must not be included in the calculation of outdoor space.

(7) Shade may be provided by structures, trees, or other objects in the environment.

(8) At least 50 percent of outdoor access space must be soil, except when conditions threaten the soil or water quality, outdoor access without soil must be provided temporarily.

(d) The producer of an organic poultry operation may temporarily confine birds. Each instance of confinement must be recorded. Operations may confine birds because of:

(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 the first 4 weeks of life for broilers and other meat type birds and the first 16 weeks of life for pullets.

(3) Conditions under which the health, safety, or well-being of the animal could be jeopardized, however the potential for disease outbreak is not sufficient cause. A documented occurrence of a disease in the region or relevant migratory pathway must be present in order to confine birds.

(4) Risk to soil or water quality.

(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 the birds are maintained under continuous organic management throughout the extent of their allowed confinement.

(7) Nest box training. Birds shall not be confined any longer than two weeks to teach the proper behavior.

(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 birds have arrived home at the conclusion of the event. These birds 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 (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 and optimizes 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) *Transport*. (1) Certified organic livestock must be clearly identified as organic, transported in pens within the livestock trailer clearly labeled for organic use and be contained in those pens for the duration of the trip.

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

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

(ii) Sick, injured, weak, disabled, blind, and lame 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 transportation and prior to slaughter. Poultry crates are exempt from the bedding requirement. When roughages are used for bedding, they must have been organically produced and handled by a certified organic operation(s).

(5) Arrangements for water and organic feed must be made if transport time exceeds twelve hours.

(i) Organic livestock operations must transport livestock in compliance with the Federal Twenty-Eight Hour Law (49

U.S.C. 80502) and the regulations at 9 CFR 89.1 through 89.5.

(ii) The producer or handler of an organic livestock operation must provide all non-compliant records and subsequent corrective action related to livestock transport during the annual inspection.

(6) Organic operations must have in place emergency plans to address possible animal welfare problems that might occur during transport.

(b) *Mammalian slaughter.* (1) Organic operations that slaughter organic livestock must be in compliance with the Federal Meat Inspection Act (21 U.S.C. 603(b) and 21 U.S.C. 610(b) and the regulations at 9 CFR part 313) regarding humane handling and slaughter of livestock.

(2) Organic operations that slaughter organic exotic animals must be in compliance with the Agricultural Marketing Act of 1946 (7 U.S.C. 1621, *et*

seq.) and the regulations at 9 CFR parts 313 and 352 regarding the humane handling and slaughter of exotic animals.

(3) Organic operations that slaughter organic livestock must provide all non-compliant records related to humane handling and slaughter issued by the controlling national, federal or state authority and all records of subsequent corrective actions during the annual organic inspection.

(c) *Avian slaughter.* (1) Organic operations that slaughter organic poultry must be in compliance with the Poultry Products Inspection Act requirements (21 U.S.C. 453(g)(5) and the regulations at 9 CFR 381.1(b)(v), 381.90, and 381.65(b)).

(2) Organic operations that slaughter organic poultry must provide all non-compliant 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 during the annual organic inspection.

(3) Organic operations that 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; and

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

Dated: April 4, 2016.

Elanor Starmer,

Administrator, Agricultural Marketing Service.

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