



April 8, 2011

Docket Clerk
U.S. Department of Agriculture
Food Safety and Inspection Service
Room 2-2127
George Washington Carver Center
5601 Sunnyside Avenue
Beltsville, MD 20705-5272.

Docket Number FSIS-2010-0041; Non-Ambulatory Disabled Veal Calves and Other Non-Ambulatory Disabled Livestock at Slaughter; Petitions for Rulemaking

Dear Sir/Madam:

The American Meat Institute (AMI) is the nation's oldest and largest meat packing and processing industry trade association. Our members slaughter and process more than 90 percent of the nation's beef, pork, lamb, and veal and nearly 75 percent of the turkey produced in the United States. AMI members and their industry partners have a vested interest in producing a safe and wholesome product for consumers and doing so in a manner that ensures the humane handling of livestock.

Many AMI members slaughter livestock, including the various species of livestock that are the subject of the above-referenced docket. Accordingly, AMI members, and the meat industry collectively, have an interest in ensuring that the Food Safety and Inspection Service's (FSIS or the agency) deliberations regarding the petitions filed by the Humane Society of United States (HSUS) and Farm Sanctuary (FS) are conducted giving complete consideration to the scientific information available and commercial and public policy implications attendant to the petitions. For the reasons that follow, AMI submits that the agency should reject *en toto* both petitions.

HUMANE SOCIETY OF THE UNITED STATES PETITION

FSIS Considered the Petition's Request in a Previous Rulemaking

According to FSIS, the HSUS petition requests that “FSIS amend the regulations to remove the veal calf set-aside provision and require that all non-ambulatory disabled veal calves be immediately and humanely euthanized.”¹ This request comes on the heels of FSIS carefully considering and promulgating just two years ago amendments to the very section in the regulations at issue.

Specifically, in March 2009 FSIS modified its regulations to provide that non-ambulatory disabled cattle offered for slaughter, including those that become non-ambulatory disabled after passing *ante-mortem* inspection, be condemned.² This amendment altered significantly how non-ambulatory cattle are handled but it did not change the language in the regulations that “allows non-ambulatory veal calves that are unable to rise from a recumbent position because they are tired or cold may be set apart and held for treatment but only under appropriate FSIS supervision.”³ That is, as AMI requested in its April 2008 petition, FSIS kept in place a provision that permits calves that are unable to rise because they are tired or cold to be segregated and held for treatment pursuant to FSIS supervision.⁴ Indeed, FSIS stated in an answer provided through AskFSIS on February 11, 2008 that “veal calves that are cold and tired may be set aside for treatment per 9 CFR § 309.13(b). Conditions commonly observed in veal calves can readily be treated before presenting the animals for slaughter.” (Emphasis added.)

To support its petition HSUS references videotape shot at a veal plant that shows inhumane treatment of calves conducted in an effort to get a non-ambulatory disabled bob veal to rise. Although unfortunate and deplorable the isolated incident referenced does not provide grounds for the agency to infer, as it seems to do in the *Federal Register* publication, that such behavior is part of the ordinary course of business in the veal industry. A singular circumstance, such as the one captured in the video, does not provide sufficient grounds for the agency to effect such a dramatic change in the regulations. A more appropriate approach is for the agency to utilize its enforcement authority in a manner that conveys to the industry that such

¹ 76 *Fed. Reg.* 6573 (February 7, 2011).

² See *Requirements for the Disposition of Cattle that Become Non-Ambulatory Disabled Following Ante-Mortem Inspection* 74 *Fed. Reg.* 11463 (March 18, 2009).

³ *Id.* at 11465.

⁴ 9 CFR §309.13 (b). “Veal calves that are unable to rise from a recumbent position and walk because they are tired or cold may also be set apart and held as provided in this paragraph. The U.S. Condemned identification tag will be removed by a Program employee following treatment under such supervision if the animal is found to be free from any such disease.”

abuse will not be tolerated and will be dealt with severely. To deny facilities the ability to treat cold and tired calves that may later be able to rise from a recumbent position because of the behavior of a few employees at one slaughter plant is without merit. It is incumbent upon the industry to work to prevent such isolated incidents, a responsibility that is acknowledged and accepted.

The Petition Ignores the Science that Provides Incentives for Humane Handling

HSUS also asserts that allowing non-ambulatory disabled calves to be set aside for treatment is inappropriate because the practice encourages abusive conduct on the part of the slaughter facility and forces movement that HSUS alleges is prohibited by the Humane Methods of Slaughter Act (HMSA). Moreover, the HSUS petition contends that the language in §309.13(b) conflicts with the HMSA because it does not provide for “humane handling of livestock in connection with slaughter...”⁵ More specifically, HSUS contends that “failing to require immediate euthanasia creates a financial incentive for establishments to engage in abusive conduct because a non-ambulatory disabled calf is worthless unless it is slaughtered.”⁶ FSIS expressed concern that the “veal calves set-aside provision may create an incentive for establishments to inhumanely force non-ambulatory disabled veal calves to rise and for veal calf producers to send weakened calves to slaughter.”⁷

The petition’s and the agency’s concern regarding incentives to engage in abusive conduct is misplaced and ignores the significant body of scientific literature that exists demonstrating a significant nexus between good animal welfare practices and meat quality. In that regard, there is a well-established body of literature that shows a strong correlation between pre-slaughter animal handling and the quality of meat that livestock yield. This correlation underscores the strong economic incentives that exist for meat plants to ensure calm, humane handling.

For example, in separate studies, H.B. Hedrick,⁸ T. Grandin,⁹ and S.D. Shackelford¹⁰ reported that control of ante-mortem stress through proper

⁵ 7 U.S.C. 1902.

⁶ 76 *Fed. Reg.* at 6573.

⁷ *Id.*

⁸ Hedrick, H. B., J. B. Boillot, D. E. Brady, and H. D. Naumann. 1959. *Etiology of dark-cutting beef*. Research Bulletin 717. University MO, Agric. Exp. Stn., Columbia, MO.

⁹ Grandin, T. 1992. *Problems with bruises and dark cutters in harvest steers/heifers*. In: *Improving the Consistency and Competitiveness of Beef -- A Blueprint for Total Quality*

management is the most effective method to reduce the incidence of dark-cutting beef, a major quality defect in beef that causes significant financial losses. With respect to veal specifically, French researchers¹¹ administered adrenalin, which is naturally released by animals during stressful situations such as rough or aggressive handling, to veal calves. The researchers concluded that the presence of adrenalin darkened veal color, which is significant because a pale color is considered an indicator of high veal quality. Such a color change would lower the value of the resulting veal.

In a noteworthy paper by Australian researchers D.M. Ferguson and R.D. Warner in the Department of Primary Industries, the researchers pose the question “Have we underestimated the impact of pre-slaughter stress on meat quality in ruminants?” The researchers note that evidence is emerging that non-pH mediated effects on meat quality can occur through pre-slaughter stress.¹²

In a 1996 paper presented to the American Association of Bovine Practitioners, Dr. Temple Grandin discusses the Colorado State University analyses that have found that bruises cost the U.S. beef industry \$1.00 per animal on feedlot beef and \$3.91 per animal on cows and bulls.¹³ In the same paper, Dr. Grandin also cites a 1994 analysis of the impact of pig stress on quality, which found that the U.S. pork industry loses \$.34 per pig due to PSE and that improvements in pig handling through reducing or eliminating the use of electric prods, which reduce petechial hemorrhages, yield gains of \$.08 per pig.

More recently, in 2010, Colorado State University researchers analyzed the blood lactate levels in pigs that were handled in varying ways. The study found that more aggressive handling was associated with higher

Management in the Fed-Beef Industry -- The Final Report of the National Beef Quality Audit - 1991. Colorado State University, Fort Collins; Texas A&M University, College Station.

¹⁰ Shackelford, S. D., M. Koohmaraie, T. L. Wheeler, L. V. Cundiff, and M. E. Dikeman. 1994. *Effect of biological type of cattle on the incidence of the dark, firm, and dry condition in the longissimus muscle.* J. Anim. Sci. 72:337-343.

¹¹ Guinot, F., Touraille, C. Ouaili, A., Renerre, M., and Monin, G., *Relationships between post-mortem pH changes and some traits of sensory quality in veal*, Meat Science, Volume 37, Issue 3, 1994, Pages 315-325.

¹² D.M. Ferguson and R.D. Warner, *Have We Underestimated the impact of pre-slaughter stress on meat quality in ruminants?*, Meat Science, Volume 80, Issue 1, September 2008, Pages 12-19.

¹³ T. Grandin, *Animal Welfare in Slaughter Plants*, presented to 29th Annual Conference of the American Association of Bovine Practitioners, 1996.

blood lactate levels.¹⁴ Higher blood lactate correlates with quality defects such as pale, soft, exudative tissue.

Similar findings were reported by scientists in the Netherlands.¹⁵ In that study, pairs of pigs of the same sex held in lairage for the same amount of time at a slaughter facility were moved quietly to the stunning pen. At this point, one of the pigs was stunned immediately, while one was forced to move through the pen for one minute. The stress caused lower pH values and higher temperatures at the semimebranosus (SM) and the longissimus lumborum (LL) as well as a higher rigor mortis value at 45 minutes post mortem in the SM. The water holding capacity of the LL was reduced. Together, these changes translate in tougher, drier pork.

Danish researchers, working with researchers at the University of Missouri, studied stress levels and pork quality and concluded that in glycolytic muscle types, such as the LM, high physical and psychological stress levels associated with stress in the immediate pre-slaughter period have a greater effect on the water-holding capacity of the meat and may promote PSE development. The researchers also found that oxidative muscle types tend to have higher ultimate pH values and produce dry, firm and dark pork in response to intense physical activity and/or high psychological stress levels pre-slaughter.¹⁶

Finally, researchers at Elanco Animal Health and the Prairie Swine Center in Saskatoon collaborated on a project that examined pig handling and welfare and associated quality impacts. Their findings were presented to the American Association of Swine Veterinarians in 2002.¹⁷ The researchers found dramatic increases in blood lactate levels (by a factor of six times) in pigs that were aggressively handled versus those that were gently handled. In addition, aggressively handled pigs had lower blood pH levels than gently handled pigs. This blood chemistry is a predictor of significant negative quality impacts. Aggressively handled pigs also were more likely to become non-ambulatory.

¹⁴ L.N. Edwards, T. Grandin, T.E. Engle, S.P. Porter, M.J. Ritter, A.A. Sosnicki and D.B. Anderson, *Use of Exsanguination blood lactate to assess the quality of pre-slaughter pig handling*, Meat Science, Volume 86, Issue 2, October 2010, Pages 384-390.

¹⁵ P.G. van der Wai, B. Engel and HGM Reimert, *The effect of stress, applied immediately before stunning, on pork quality*, Meat Science, Volume 53, Issue 2, October 1999, Pages 101-106.

¹⁶ E. Hambrecht, J. J. Eissen, D. J. Newman, C. H. M. Smits, M. W. A. Verstegen and L. A. den Hartog, *Pre-slaughter handling effects on pork quality and glycolytic potential in two muscles differing in fiber type composition*, Anim. Sci. 2005. 83:900-907.

¹⁷ D.B. Anderson, *et. al.*, *Physiological Responses of Market Hogs to Different Handling Practices*, American Association of Swine Veterinarians, Kansas City, Missouri, March 5, 2002.

This extensive body of research studies refutes the contention in the petition, and echoed by FSIS, that a slaughter plant has an economic incentive to engage in abusive behavior in order to force veal calves, or any other non ambulatory livestock, to rise.

FSIS Fails to Explain the “Potential Uncertainty” it Seeks to Eliminate

In the notice the agency also indicated that it agrees with HSUS that prohibiting the slaughter of all non-ambulatory disabled veal calves may remove “potential uncertainty in determining the disposition of calves that have been set aside and would be consistent with the requirements for the other classes of non-ambulatory disabled cattle.”¹⁸ The agency’s explanation about this so-called “potential uncertainty,” however, is incomplete. Indeed, neither HSUS nor the agency articulate the nature of the “uncertainty” the agency seeks to avoid and for that reason alone cannot support the tentative decision.

Moreover, the “uncertainty” cannot be associated or attributable to BSE concerns. Every federal agency that has addressed the BSE issue, including FSIS, has concluded that BSE is of no concern with respect to veal calves. The disease is simply not present at such a young age. To contend otherwise flies in the face of every position USDA has taken.

In addition, the rationale offered that eliminating the set aside provision would be “consistent with the requirements for the other classes of non-ambulatory disabled cattle is unavailing. The set aside provision was carefully considered just two years ago and FSIS offers no explanation in this notice as to why that position should change. Indeed, as FSIS said previously in distinguishing veal calves from mature non-ambulatory cattle, “Conditions commonly observed in veal calves can readily be treated before presenting the animals for slaughter.” (Emphasis added.) Thus, the FSIS tentative position seems to have been taken arbitrarily and without sufficient support. For the foregoing reasons FSIS should reconsider its tentative determination and deny the HSUS petition.

FARM SANCTUARY PETITION

¹⁸ *Id.*

FSIS regulations currently do not require the condemnation of non-ambulatory disabled livestock other than cattle.¹⁹ When the agency conducted the rulemaking regarding non-ambulatory disabled cattle, a number of comments were submitted from animal welfare organizations and others about the welfare of other species such as sheep, goats, hogs, *etc.* Those comments advocated in favor of extending the slaughter ban to other livestock species to ensure humane handling.

The Farm Sanctuary Petition Ignores the Financial Realities Regarding Livestock Procurement and Processing Plant Operations

The FS petition requests that FSIS amend the regulations such that all non-ambulatory disabled livestock, regardless of species, are condemned. The FS petition references Non-Compliance Records (NRs) documenting inhumane handling, which focus mainly on swine.²⁰ As with the HSUS petition the FS petition argues that plants have a financial incentive to “force these animals through the slaughtering process, which encourages inhumane treatment.”²¹ FS further argues that such a ban will “encourage livestock producers and transporters to improve their handling practices” and will “prevent diseased animals from entering the food supply.”²²

The FS petition is as flawed and ill-considered as the HSUS petition. In that regard, it suffers the same infirmities as does the HSUS petition with respect to its argument regarding economic incentives for plants to engage in abusive behavior.²³ The FS petition, as does the HSUS petition, fails to grasp the impact of a commonly followed practice in the hog processing industry. Specifically, in many hog slaughter facilities, the company only pays for an animal after it passes ante-mortem inspection by the agency and goes across the company scales. Thus, non-ambulatory animals in a plant’s pens that cannot rise and are euthanized do not cost the procuring facility money. Thus, there is no incentive for the slaughter plant to coerce the hogs to rise through abuse. Any loss is incurred not by the slaughter plant, but by the hog producer who delivered the pigs to the plant.²⁴ The industry is undertaking a study to learn more about the incidence of non-ambulatory pigs and how that rate can be reduced.

The FS petition and the HSUS petition also either fail to appreciate or simply ignore the economic realities associated with operating a livestock

¹⁹ 9 CFR § 309.2(b)

²⁰ The NRs cited in the petition are more than five years old. For that reason alone they should be accorded no weight.

²¹ 76 *Fed. Reg.* at 6574.

²² *Id.*

²³ See discussion *infra*, page 8.

²⁴ The agency’s adoption of the proposed change would, in effect, cost hog producers many millions of dollars in lost revenue, for no purpose.

harvesting and processing establishment. A basic understanding of those costs quickly puts to rest any thought that a plant has an interest in engaging in abusive behavior to force the livestock to become ambulatory.

The agency has the authority to suspend operations at an inspected establishment in the event that an incident of inhumane treatment or slaughter occurs and on a number of occasions FSIS has exercised that authority. The cost a company incurs because of such a suspension is an enormous disincentive for a company to engage in inappropriate behavior.

For example, assume there are 500 employees working in a plant's processing operation and average hourly earnings are \$13.52, according to U.S. Department of Labor data. A suspension of just one hour at that establishment idles those 500 employees, costing the company \$6760 in labor costs alone. And this number does not include other costs incurred while there is no production, *e.g.* utilities, *etc.* Certainly, the costs attendant to a suspension are in part a function of the size of the facility but in virtually every size facility the costs associated with suspension are far greater than the value of the animal at issue. In that regard, for example, one moderately sized plant estimated the cost of suspension to be in excess of \$9,000 per hour while another facility calculated the cost to be approximately \$3,900 per hour.

Against this fundamental economic background and given that almost all suspensions attendant to animal welfare concerns historically last for at least a few hours, and they can last for days, no rational person engaging in a cost/benefit analysis would conclude that the supposed "benefits" that could flow from inappropriate behavior outweigh these substantial costs. Presuming that the agency's inspectors are reasonably vigilant in their duties the idea that there is an economic incentive for a plant to engage in abusive behavior fails under any rational economic analysis.

The Farm Sanctuary Petition would Undermine Critical Animal Disease Detection Systems

An additional and critical problem with the FS petition is that, if granted, it would undermine the important animal disease detection role that ante-mortem inspection at the slaughter facility provides. The FSIS ante-mortem inspection process serves at least two purposes: 1) to determine whether the animal is fit to be harvested and subsequently processed to provide products for human consumption; and 2) to serve as a front-line detector of animal diseases, allowing the government to identify and react quickly to diseases that may be communicable and highly contagious.

The FSIS Livestock Slaughter Inspection Training Manual specifically recognizes that some ailments may only be detectable while viewing an animal in motion, which is impossible during a post-mortem inspection (*e.g.*, lameness, slobbering, fever, *etc.*).²⁵ Indeed, the manual provides that “animals may be recumbent nonambulatory or standing non-ambulatory for a variety of reasons ranging from an injury to severe illness or depression.”²⁶ The manual also states that “[A]ll nonambulatory livestock must be examined by the veterinarian.” In short, federal ante-mortem inspection procedures are critical in preventing the spread of diseases, such as hog cholera and vesicular disease. Thus, the process of ante-mortem inspection is, in essence, an early-warning detection system that allows the on-site federal veterinarians to make crucial decisions regarding whether to separate or quarantine what could be the entire swine herd. Post-mortem inspection alone does not allow for this type of early detection of communicable diseases.

The FS petition, however, would impede that important role because, absent an FSIS dictate that all animals be held for ante-mortem inspection, many non-ambulatory animals would be euthanized and disposed of before being examined for disease. Ironically, many animals, especially in the case of hogs, in the time it can take for the federal veterinarian to arrive to conduct such an inspection likely would become ambulatory, thereby creating a quandary regarding the status of such animals when subject to ante-mortem inspection. That is, would livestock in such circumstances still be subject to condemnation even if found not to be diseased? If so, why and if not, why should they be treated differently from animals that are non-ambulatory, are subjected to inspection, and also found to be disease free?

Granting the Petitions Would Result in Unnecessary Waste with No Identifiable Benefit

The petitions raise a broader concern about simply condemning pigs and calves that cannot walk when they arrive at plants. If a non-ambulatory pig or veal calf could become ambulatory with rest or warming, if they can be handled in a way to minimize discomfort, if economic incentives exist to promote good care, and if these animals can pass ante-mortem inspection, is it really appropriate, ethically, morally, and otherwise, to turn livestock that have the potential to nourish people into little more than a waste disposal problem? In destroying these livestock, a farmer’s livelihood is also harmed dramatically. The only beneficiaries under this scenario are the petitioners, who will be able to claim “victory” to their constituents, a collection of persons whose underlying purpose is to oppose animal agriculture and meat consumption.

²⁵ FSIS Livestock Slaughter Inspection Training Manual at 10-11.

²⁶ *Id.*

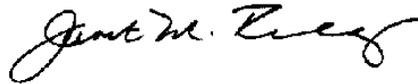
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For the foregoing reasons AMI respectfully requests that both the HSUS and Farm Sanctuary petitions be denied. If you have any questions regarding these comments or anything else regarding this matter, please contact Mark Dopp at mdopp@meatami.com or 202 587 4229 or Janet Riley at jriley@meatami.com or 202 587 4245.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mark D. Dopp", with a long horizontal flourish extending to the right.

Mark D. Dopp
Senior Vice President, Regulatory
Affairs and General Counsel

A handwritten signature in black ink, appearing to read "Janet M. Riley", with a long horizontal flourish extending to the right.

Janet Riley
Senior Vice President, Public Affairs
and Member Services