April 19, 2023

Re: Comments on Use of Electronic Identification Eartags as Official Identification in Cattle and Bison

The proposed rule to require electronic ID tags on cattle crossing state lines is an illogical, ineffective proposal that will unfairly burden small-scale producers and therefore undermine the Administration’s stated goal of making our meat supply more resilient. The undersigned organizations and individuals urge the agency to withdraw this meatpacker-driven proposal and instead assemble a stakeholder group with significant representation of small- and mid-scale producers to discuss the reforms needed to better protect both animal health and the security of our domestic food supply.

I. Executive Summary

The 2013 Animal Disease Traceability rule requires that all dairy cattle and adult beef cattle that cross state lines have some form of “official identification.” The rule specifically provides that people can use either electronic or low-tech, traditional forms of ID. Now the agency is proposing to make electronic ID the only form of official ID allowed for cattle crossing state lines under the ADT rule.

The proposed rule to mandate electronic ID is an illogical, ineffective proposal that will unfairly burden small-scale farmers and ranchers. This rule should be withdrawn for multiple reasons:

1. It will be ineffective in improving animal traceability.

   Based on the agency’s own analysis, the proposed rule will be ineffective. The agency estimates that it will impact only 11% of cattle in the country; yet an earlier congressional analysis concluded that 18% was too low of a participation rate to make traceability programs effective. In addition, by increasing the number of digits in the ID number, the agency is actually increasing the probable error rate.

2. The agency has failed to show a need to impose more expensive requirements.

   Prior to imposing any new regulatory requirements and costs, an agency should conduct an analysis to determine the need for new regulations and whether the new requirements actually address that need. Despite numerous requests, the USDA has failed to conduct such an analysis for mandatory electronic animal ID.

3. The proposed rule disproportionately harms small farmers and ranchers.
Moving to a completely electronic ID system carries significant costs, not only from the cost of the tag itself but also associated infrastructure costs. This impacts not only farmers, but also sales barns and large-animal veterinarians. Large corporate-controlled operations will not only benefit from economies of scale, but could structure their operations to avoid individual ID requirements altogether.

4. **It ignores the extensive stakeholder work that went into the Animal Disease Traceability rule.**

The ADT rule, and in particular the decision to include low-tech traditional forms of ID, was the result of extensive work and negotiations between the agency and numerous stakeholders. In proposing to mandate electronic ID, the agency is working contrary to the carefully negotiated consensus.

5. **Mandating electronic ID undermines the agency’s goal to promote a resilient food system.**

If the agency wishes to build resilient, diversified supply chains, it needs to take steps to avoid regulations and policies that are prejudiced against small- and mid-scale producers, such as mandatory electronic Animal ID.

These issues are discussed in greater detail below.

### I. Background

It is important to place the proposed rule in context.

In 2005, the USDA proposed the National Animal Identification System (NAIS), which would have required premises registration, electronic animal identification, and tracking of all movements for all livestock in the country. In response to widespread opposition, the agency withdrew the plan in 2010. The USDA then spent two years on an intensive stakeholder process and, in 2013, adopted the Animal Disease Traceability rule. ADT requires that all dairy cattle and adult beef cattle that cross state lines have some form of “official identification.” The 2013 rule specifically provides options for both electronic and traditional forms of ID.

Starting in 2020, the USDA began to push electronic ID again after working with informal groups made up of large meatpackers, technology companies, and the trade associations that they dominate. Independent producers were not part of the discussions, nor was the Federal Advisory Committee Act followed. USDA issued a “fact sheet” in which it simply announced that only electronic ID would qualify as official identification. After public outcry, including a court challenge for violations of the Administrative Procedures Act, the agency withdrew the fact sheet.

Now the agency is formally proposing a rule to make electronic ID the only form of official ID allowed for cattle crossing state lines under the ADT rule. While this
addresses the procedural objections to the 2020 action, it does not address the substantive reasons that farmers, ranchers, and many others have objected to mandatory electronic ID ever since the original plans for NAIS.

II. The Proposed Rule Will be Ineffective

Based on the agency’s own analysis, the proposed rule will be ineffective for two reasons: extremely low participation and high error rates. (Note that we contends that mandatory electronic ID will be ineffective for multiple reasons; these are just the reasons that are apparent on the face of the agency’s publication.)

First, the agency is estimating that the new rule will impact just 11 million cattle per year, or approximately 11% of the cattle in the country.

In a Congressional Research Service Report in 2010, the CRS noted that 18% participation by cattle producers in the National Animal Identification System (NAIS) was too low to be effective:

Participation in the initial phase of NAIS, premises registration, reflected this same degree of interest, as very high percentages of eligible premises were registered for most animal species … with the exception of cattle (18%). USDA stated that such a low participation rate for cattle rendered NAIS ineffective as a tool for controlling animal disease, and that a much higher participation rate would be necessary to respond effectively to an animal disease outbreak.”1

If 18% was too low for premises registration to be effective, then 11% of cattle being tagged will certainly be ineffective.

It is unlikely that the rule will actually only impact 11 million cattle per year. Previously, USDA had estimated that the ADT Rule would impact 30 million cattle that cross state lines annually, and this proposed rule would thus impact at least that many. Its true impact is likely to be even higher, since many in-state programs are connected to the USDA definition of “official identification”; thus, many individuals will be required to tag their cattle with electronic ID even for in-state movements if this proposed rule is finalized.

While we do not know why the USDA would try to understate the scope of the rule, the outcome is that the agency has avoided doing a full cost-benefit analysis by claiming such low anticipated numbers. Yet, if the USDA’s estimate is indeed accurate, then this new regulation will make no real difference to the traceability of the national herd – and is thus a completely unnecessary cost. Either way, the proposed rule should be withdrawn.

1 Congressional Research Service, Animal Identification and Traceability: Overview and Issues (Nov. 29, 2010), Summary (emphasis added)
Second, the proposed rule will be ineffective because the probable error rate will make the conversion to EID tags counter-productive. As have previously pointed out, converting to EID tags involves not only the costs of the EID tag, but all the associated infrastructure, particularly readers and the ongoing costs of keeping up with technological changes. In an effort to address that objection, the proposed rule provides that the EID tags will include visual ID numbers so that they can be read either electronically or visually.

Yet the agency’s justification for shifting to EID is that there are too many errors when individuals transcribe the current visual-read tags. Notably, the metal brite tags that are allowed under the current ADT rule have a 9-digit alphanumeric code. In contrast, the EID tags have a 14-digit code. Whatever error rate occurs transcribing a 9-digit code will be far less than the error rate in transcribing 14-digit codes.

**In other words, the visual read option significantly multiplies the very problem that USDA claims to be trying to solve with the proposed rule.**

It's intuitive that a farmer would make more mistakes entering a 14-digit code than he would when entering a 9-digit one. Instead of having 9 opportunities to get mis-read or mis-write the digit, there are now 14 different opportunities for error.

Mathematically, the way to calculate a probability of someone entering a 9-digit code correctly is to multiply the probability of entering one digit correctly times itself 9 times. Similarly, that probability of entering a 14-digit code correctly is the probability of entering one digit correctly multiplies by itself 14 times. Since the probability of entering a number correctly is always less than 1 (it's 1 only when absolutely no mistake is ever made), this means that the probability of entering a 14-digit code **correctly** is inherently smaller than that of entering a 9-digit code correctly, *i.e.* there are necessarily going to be more mistakes when entering the **longer** code.

To visualize how this would play out in real life, we’ll use 10,000 head of cattle whose tags are being read by small farmers or sale barns through which they pass through. Even if the farmers and workers have a near-perfect level of accuracy and read each individual digit correctly 99.99% of the time, the mistake rate would go up by nearly two thirds if they are forced to switch from the 9-digit tag to the 14-digit one.

If the farmers and workers gets it right "only" 99% of the time, which is still a high accuracy rate, forcing them to switch to a 14-digit tag would result in 449 more mistakes than under the current system with metal brite tags.

The full comparison is summarized in the table below:
<table>
<thead>
<tr>
<th>Probability of Entering Single Digit Correctly</th>
<th>Probability of Entering 9-Digit Tag incorrectly</th>
<th>Probability of Entering 14-Digit Tag Incorrectly</th>
<th>Difference Per 10,000 Animals</th>
<th>% difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>99.99%</td>
<td>0.09%</td>
<td>0.14%</td>
<td>5</td>
<td>64.3%</td>
</tr>
<tr>
<td>99.9%</td>
<td>0.9%</td>
<td>1.39%</td>
<td>50</td>
<td>64.4%</td>
</tr>
<tr>
<td>99.7%</td>
<td>2.67%</td>
<td>4.12%</td>
<td>145</td>
<td>64.8%</td>
</tr>
<tr>
<td>99.5%</td>
<td>4.41%</td>
<td>6.78%</td>
<td>237</td>
<td>65.1%</td>
</tr>
<tr>
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<td>6.98%</td>
<td>10.63%</td>
<td>365</td>
<td>65.6%</td>
</tr>
<tr>
<td>99%</td>
<td>8.64%</td>
<td>13.13%</td>
<td>449</td>
<td>65.9%</td>
</tr>
</tbody>
</table>

Collectively, this will result in significantly more problems. According to the 2017 Census of agriculture, there are 717,635 small farms with fewer than 100 head of cattle that collectively own over **18 million head**. Many of these farms will not purchase expensive electronic readers and will instead continue to hand-transcribe numbers, now with much higher error rates.

Note that these calculations assume that a farmer entering a multi-digit code is going to make mistakes at the same frequency (same average number of mistakes per 100 digits), whether he's entering a 9-digit tag or a 14-digit one. In reality, the error rate for entering the 14-digit strings is likely to be even higher due to fatigue, carelessness, and the trouble involved in memorizing longer strings of digits.

The proposed rule thus fails **on its face** to make any meaningful improvement to traceability, and it should be withdrawn.

### III. The agency has failed to show that there is a need to impose more expensive requirements on cattle owners and related businesses.

Prior to imposing any new regulatory requirements and costs, an agency should conduct an analysis to identify (1) the goal, and (2) what is necessary to reach that goal. Despite numerous requests over the last 15 years, the USDA has failed to conduct that analysis, or, if it has been conducted, the agency has not shared it with the public.

First, what is the goal? The agency appears to be continuing to set “traceability” as a goal in and of itself. **Yet traceability is a tool, not a goal.** The goal is animal health and controlling disease. Whether or not there is sufficient traceability should be judged based on its effectiveness in meeting those goals; and the costs of enhancing traceability should be compared to the costs of alternative steps that would help meet the goals of animal health and controlling disease.

Over the last fifteen years, the agency has repeatedly referred to a goal of being able to trace an animal from birth to death within 24 hours. As justification, the agency has said that such traceability is needed to address highly contagious, fast-moving disease such as Foot & Mouth Disease. But that justification has two major flaws. First, such fast-moving diseases do not require birth to death traceability, but merely the ability to trace
where an animal has been within the last few days. In contrast, diseases with long incubation periods, such as tuberculosis, do call for birth-to-death traceability – but there is little harm if the traceback takes longer than 24 hours for such slow-moving diseases.

Second, the agency has failed to show that traceability of domestic livestock is the “weak link” in the ability to address FMD and similar diseases. To the contrary, early diagnosis and good animal husbandry are far more important to disease control. Consider that the confinement pork industry already has premises ID and electronic ID, yet it had no apparent effect on the number of sick, dead, or euthanized pigs during the porcine epidemic diarrhea outbreak in 2013. The same is true for the highly consolidated poultry industry and the current avian flu outbreak.

Third, even if one designates traceability (as opposed to animal disease control) as the goal, the next question is what is necessary to reach that goal? The agency has claimed that the state exercises show weaknesses in the current traceability system, but has not identified what those weaknesses actually are – nor how switching to electronic forms of ID will solve them. Were the slow or failed tracebacks due to the type of ID the cow had? A lack of ID, either because the owner never tagged the cow or the tag fell out (a problem that is greater with RFID tags than with the metal brite tags that USDA proposes to eliminate)? Problems with state agency personnel? Database or other technology flaws? Messy data from the failure of slaughterhouses to report “retired” ID numbers? There are numerous things that can slow tracebacks or make them impossible to complete, many of which do not vary with the type of ID tag. The USDA has provided no evidence that eliminating low-tech forms of ID will actually address the alleged problems.

IV. The costs of the program will disproportionately harm small farmers and ranchers.

While providing only questionable benefits, if any, an electronic ID mandate carries significant costs.

The agency has failed to provide a cost-benefit analysis for its proposal, but the cost-benefit analyses conducted in the past on the National Animal Identification System (NAIS) proposal showed that a system of electronic ID and tracking would impose very high costs on small-scale farmers and ranchers.

The agency may respond that NAIS involved tracking as well as the ID itself. Yet the costs of the currently proposed mandatory EID requirement goes beyond the costs of the tag itself. Moving to an all-electronic ID system carries associated costs: electronic tag readers, computers, etc. As discussed above, the agency has not accounted for these associated costs, claiming that the tags will still be able to be read visually and hand-recorded. But since the proponents’ main argument in favor of electronic ID is that too many mistakes occur when people hand-transcribe the nine (9) digit numbers on metal brite tags, it is disingenuous and misleading to say that it will work for people to hand transcribe the fourteen (14) digit numbers that are used on RFID tags.
Moreover, we have a real-world example of the impacts of mandatory electronic ID without the full NAIS program. In 2007, the State of Michigan began to require electronic ID tags on cattle for in-state movements. The Farm and Ranch Freedom Alliance submitted a FOIA request to the Michigan Department of Agriculture and Rural Development, seeking to determine the costs imposed by the program on the state, farmers, sale barns, veterinarians, and related businesses. MDARD’s response was that it would cost over $1,724\(^2\) to produce such documents because it would take high-level employees many hours to compile the information. In other words, Michigan imposed this requirement 15 years ago, and it still doesn’t know what it actually cost to implement it.

Thus, the only way for the public to judge the costs of an electronic ID mandate is to look at the outcome. Based on the USDA Agricultural Census from 2007 (the same year Michigan implemented mandatory electronic ID for cattle) and 2012:

- Michigan saw a 3% decrease in the number of very small cattle operations (fewer than 10 head), even though nationally the number of such farms increased by 4%.
- Both Michigan and the entire country saw similar decreases in the number of small to mid-size farms.
- Michigan saw a 16% increase in the number of large cattle farms (500 to 999 cows), while nationally the number only increased 7%.
- Michigan saw a 35% increase in the number of very large cattle farms (over 1,000 head), even though the number of those operations decreased slightly nationally.
- Michigan saw a 50% increase in the number of cattle on those large farms, even though the number of cattle in large operations stayed basically steady nationally.

These numbers reflect a significant loss in small farms and a significant consolidation of the industry, far worse than the national trends. What is different about Michigan? Electronic cattle ID, which the USDA now proposes to impose on the entire country.

V. The proposed rule is in direct contradiction of the carefully negotiated 2013 rule.

In 2013, the USDA published the Animal Disease Traceability (ADT) rule. This rule was the result of extensive work and negotiations between the agency and numerous stakeholders. Several representatives for small farmers and ranchers served on the Secretary’s Advisory Committee on Animal Health during that time. The Committee had multiple, extensive discussions on the proposed rule, as did many others who provided input to USDA.

The ADT rule explicitly provides that cattle owners can use non-electronic forms of official identification when they are required to identify their animals under the program.

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\(^2\) MDARD revised the charge to $1,624 when challenged, still reflecting its inability to provide a response to what should have been a simple request to identify the costs imposed by its electronic ID requirements.
Specifically, “official identification devices and methods” include an “official ear tag,” properly registered brands accompanied by an official brand inspection certificate, tattoos and other identification methods acceptable to breed associations, “group/lot” identification numbers, backtags, or other forms of identification as agreed to by the shipping and receiving states. The 2013 rule was designed to “encourage” the use of low-cost technology, specifically metal eartags. It allowed producers to use a variety of “official identification numbers” and “official ear tags,” based upon the National Uniform Eartagging System (NUES), an Animal Identification Number (AIN), or a location-based number system.

Indeed, the 2013 rule explicitly forbids states from mandating the use of RFID technology as part of the interstate requirements. The USDA’s fact sheet stated:

> While [] producers may elect to use official eartags with radio frequency (RF), no state or tribe may require official RF tags for cattle moving into their jurisdiction. This ensures that all producers using the low cost official eartags may move their cattle to any other State or Tribal land using that method of official identification.

The ability to use low-cost, low-tech methods of identification was a key point during the discussions around the rulemaking. The ability to use either RFID or non-RFID tags was absolutely critical to many stakeholders, as was recognized by USDA at that time:

> One of the USDA’s priorities when it designated the framework for animal disease traceability was to ensure that producers were not adversely impacted by the cost of the program by focusing on low-cost technologies. USDA plans to provide the NUES tag (metal eartags) available at no cost to producers to the extent funds are available. The final rule also allows for a variety of official identification methods that have been approved by APHIS, so the producer can choose a format that works best for their operation.

The proposal to change this carefully negotiated position is inappropriate, particularly as the agency has not involved small producers and other stakeholders in the manner in which it did in 2013. Rather, since 2020, the agency has signaled that its intent is to make this change based on its ongoing close collaboration with large meatpackers, technology companies, and their trade associations.

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VI. The proposed rule undermines the agency’s goal to promote a resilient food system

If the agency wishes to build resilient, diversified supply chains, it needs to take steps to avoid regulations and policies that are prejudiced against small- and mid-scale producers. It makes no sense to provide grant funds and specialty programs to promote diversification if the agency simultaneously adopts regulations and policies that unduly burden small-scale, diversified producers.

Regulations in general have a greater impact on small business, disadvantaging them. A study from the U.S. Chamber of Commerce Foundation found that the costs of federal regulation to small businesses (50 or fewer employees) are nearly 20% higher than average for all firms. Moreover, every $1 increase in per capita regulatory expenditures is directly correlated with decreases in the smallest firms (those employing between one and four people) by 0.0156%, “a figure whose burden quickly adds up.”

Before getting into any discussion of the specific costs, however, it is vital to recognize that the structure of the ADT rule makes it uniquely beneficial for the largest, most consolidated portion of the industry. Under the ADT rule, animals that would normally be required to have an ear tag or other individual form of official identification can instead by identified by group numbers if they are managed together as a group from birth to death. See 9 C.F.R. section 86.1 (“Group/Lot identification number (GIN). The identification number used to uniquely identify a ‘unit of animals’ of the same species that is managed together as a group throughout the preharvest production chain. When a GIN is used, it is recorded on documents accompanying the animals moving interstate; it is not necessary to have the GIN attached to each animal.”) In other words, vertically integrated operations, in which an entity owns the animal through its entire lifetime, can save large sums of money as compared to independent producers (even mid-size and large independent producers). With the higher costs of EID compared to the traditional forms of identification, this will create incentives for vertical integration and consolidation in the cattle industry – pushing it towards a model similar to hogs and poultry, in which meatpackers own the animals and farmers are effectively hired labor.

Moreover, in supporting that diversity of scale, the issue is not just how much a regulation might cost a given business, but the comparative costs -- how much more it costs small entities than large ones. Related to that is the question of who benefits from the regulation.

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Even without the provision for group identification, the costs of the mandatory electronic ID are clearly much higher on small businesses, yet the overwhelming majority of the benefits (through increased export markets) flow to the large entities. That disconnect between who bears the greatest costs and who reaps the majority of the benefits is a key driver of consolidation.

First, consider the cost portion of the equation. A 2006 Kansas State University report found that costs of an RFID-based system are significantly higher for people with smaller herds due to the expense of the electronic infrastructure. USDA’s 2009 analysis affirmed this finding that significantly greater costs would be imposed on small producers. Specifically, the agency found that large operations would pay $2.48/head as compared to $7.17/head for what the agency termed the “smallest operations.”

That’s almost three times as high a cost for small operations – and the agency significantly underestimated the real costs to small producers. First, the so-called “smallest operations” included up to 50 head of cattle, even though USDA’s NASS Census has classifications for cattle operations with 1-9 head, 10-19, and 20-49 head. Lumping all these operations together disguised the true (higher) cost for very small cattle operations, who provide important diversity and resiliency to the cattle and beef supply chains.

Second, the agency’s assumptions as to how a small operation would be able to comply were unrealistic. For example, the USDA analysis recognized that the cost of RFID readers will not be economical for small producers, so it advanced the premise that a new business will spring up, to do custom reading. It assumed that there would be custom tag reader businesses within 25 miles of each small farm, even though ranches in the West and Southwest may encompass more than 25 miles of territory each. It also assumed that the cost of RFID reading would be comparable to the cost of brand inspections, even though brand inspections do not require expensive equipment, unlike RFID tagging and reading. These demonstrably flawed assumptions, and other flaws in the 2009 cost estimate, mean that small producers would pay far more than 3 times the amount to comply with an electronic ID mandate, compared with the largest operations.

Next, consider the benefits portion of the equation. While agency and industry representatives have repeatedly claimed that electronic animal ID is about animal health

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8 In the USDA’s 2009 cost analysis, the agency found that the cost increased as herd size decreased, to the point that it would be uneconomical for the smallest producers to do the tagging and reading themselves. Benefit-Cost Analysis of the National Animal Identification System, NAIS Benefit-Cost Research Team (Jan. 14, 2009) (hereinafter “Cost-Benefit Analysis”) at page 23.

9 RFID Cost.xls – A spreadsheet to estimate the economic costs of a radio frequency identification (RFID) system, K.C. Dhuyvetter and D. Blasi, Version 7.6.06.


generally, no one has produced any data or analysis to show that the current system – which includes more affordable, low-tech options for producers – is insufficient to address animal disease. Rather, the real driver of the program is the export market and the desire to develop a uniform, international system that makes it easier for companies such as JBS and Tyson to ship products around the world and maximize their profits. In the 1980s, farmers were promised that the benefits of such exports would trickle down to the producers; four decades of experience has proven that this is false, and that such reliance on export markets has merely helped fuel the “get big or get out” approach that has led us to such a fragile agricultural and food system.

Moreover, when you impact a small business, you not only affect that business, but its suppliers and purchasers. By impacting small ranchers, a mandatory electronic ID requirement would also impact sales barns, feed stores, and large-animal veterinarians -- all of which are essential to the continuation of the supply chains and rebuilding a resilient, secure food supply.

VII. Conclusion

The undersigned thus urge the USDA to withdraw the proposed rule. Mandatory electronic ID is driven by the interests of large meatpackers, not American farmers and consumers. The proposed rule will push our livestock and meat industry towards greater consolidation, which is precisely the opposite of what is needed for the security and welfare of our country.