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Ms. Carolyn Hoskinson
Director, Office of Resource Conservation and Recovery
Office of Land and Emergency Management (5306T)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460


Ms. Hoskinson –

The National Chicken Council (NCC) appreciates the opportunity to comment on the joint-agency “Draft National Strategy for Reducing Food Loss and Waste and Recycling Organics.” NCC is the national, non-profit trade association that represents vertically integrated companies that produce and process more than 95 percent of the chicken marketed in the United States. NCC and our member companies are committed to reducing food loss and waste from farm to fork. In our comments, we will provide an overview of how the industry works to minimize food loss and waste and areas in which the Environmental Protection Agency (EPA) and other Federal agencies could aid in further reductions of food loss and waste.

Use of Byproducts

A perfect example of minimizing food waste is the use of various byproducts in the diets of chickens. By nature, chickens are excellent at upcycling as they can readily digest various byproducts and turn them into edible protein. While the diets of chickens are predominantly corn and soybean meal, some of the bird’s energy and protein needs can be met by including various byproducts such as bakery meal, animal proteins/fats, distillers dried grains with solubles (DDGS), and peanut meal.

Bakery meal is composed of leftover or unsold baked goods such as bread, cookies, or crackers and may also include doughs and ingredients. These products are dried and ground and make an excellent feed ingredient for chickens and other animals. Instead of being sent to landfills or incinerated, this product is turned into a usable low-cost animal feed source. This provides an outlet for the baking industry and a sustainable feed ingredient for the poultry industry – a relationship that benefits both parties.

Animal proteins and fats are a byproduct of meat and poultry processing. Production of these byproducts is estimated to be over ten million tons in the U.S. annually. They are sent to rendering facilities and converted into numerous nutrient-dense feed ingredients such as meat and bone meal or poultry meal. According to the U.S. Department of Agriculture (USDA)
A byproduct of the ethanol industry, DDGs, have steadily increased in production as the ethanol market expands. According to the February 1, 2024 report from the U.S. Department of Agriculture (USDA) National Agricultural Statistics Service (NASS), 1.95 million tons of DDGS were produced in December 2023, up from the 1.68 million tons produced in December 2022. Again, this provides an alternative source of protein and energy in the diets of chickens and other animals and can replace some of the corn and soybean meal in those diets.

Finally, nutritionists may incorporate peanut meal into the diet of chickens, which provides protein to the birds. While this product may be limited depending on geographic location, peanut meal is a byproduct of peanut oil manufacturing and is another good example of the prevention of food recycling. While other byproducts can be used in the diets of chickens and other animals beyond those mentioned in these comments, it is important to highlight that including them in rations not only provides a mechanism to upcycle these products but can also aid in least cost formulation of diets.

Importance of Rendering

As previously mentioned, animal proteins and fats generated in meat and poultry processing can be converted through the rendering process into various byproducts for poultry and livestock consumption. While these animal proteins and fats are inedible for humans, they can provide an excellent protein and energy source for animals. Rendering is the process of using high heat and pressure to turn various meat and poultry products into reusable, nutrient-dense items for consumption by livestock and pets or into organic fertilizer. The poultry industry and other meat processing facilities across the U.S. use rendering facilities to process inedible parts of the animal or those parts that do not meet standards for human consumption. One of the most common byproducts from the poultry industry is meal feather. Feathers are collected, ground, and dried. They serve as a slow-release high-nitrogen organic fertilizer or a feed additive for livestock.

The generation of byproducts for animals to consume through the rendering process is not a novel concept. The industry has been rendering for centuries originally to make soap and candles. With current production and population sizes, rendering facilities are seeing an influx in their industry unlike any other time in the past. Ensuring that rendering facilities can be easily expanded or built would be a great way to reduce waste and improve the repurposing of byproducts that would otherwise go to waste. Rendering is not limited to animal products alone – it is a way of recycling organic matter that is robust, effective, sustainable, and environmentally sound. Investments in rendering will be important as the demand for animal protein increases. However, expanding ways to improve the efficiency and effectiveness of rendering will take additional funding and research.

Importance of Automation and Transportation

In the poultry industry specifically, technological expansions have greatly reduced food waste through improvements in processing establishments. Automated technologies can help ensure that chickens are broken down into parts more accurately thereby minimizing miscuts, downgrades, and products that may be sent to rendering. These technologies have also helped ensure that more meat is removed from the bone and enters the food supply. As artificial intelligence develops and technologies are perfected, the industry will continue to minimize food waste.
waste from chicken production, ensuring that everything from the bird is yielded and little goes to waste.

The prompt delivery of fresh products to retail and food service to maximize shelf life is another critical component to decreasing food waste. As with other fresh agriculture products, fresh chicken has a limited shelf life. Delays from the processing establishment to the grocery store, distribution center, etc. may reduce the odds that the end user will consume the chicken and increase the likelihood that the chicken will be discarded. Policies that decrease the ability to put chicken on shelves may lead to that same chicken being rendered, diverted for cooking, or having its shelf life shortened.

The industry works tirelessly to reduce food waste and appreciates the Agency seeking input and expressing the desire to aid in improving the many processes involved. As mentioned above, there are many ways in which the industry reduces food waste, recycles byproducts, and minimizes products that would otherwise be destined for a landfill. Unfortunately, several current and pending regulatory policies either do or would contribute to food waste in the chicken industry. Reevaluating these policies would make it easier for industry to reduce food loss and waste while ensuring that consumers still have access to safe, nutritious, and affordable chicken and chicken products.

**Additional Solutions for Reducing Waste**

We appreciate the opportunity to highlight a few actions the various Federal agencies could do today that would reduce waste in meaningful ways. Specifically for the broiler industry, allowing surplus hatchery eggs into the breaking egg market would reduce waste and decrease the costs of certain foods containing eggs.

Historically, the broiler industry sent surplus hatching eggs for processing at egg breaking establishments (but not into the table egg market) where breakers pasteurized the eggs under FSIS jurisdiction and oversight. In 2009, FDA published a final rule titled Prevention of Salmonella Enteritidis in Shell Eggs During Production, Storage, and Transportation, codified at 21 C.F.R. Part 118 (the “Shell Egg Rule”).¹ This rule required that shell eggs, including surplus broiler eggs sent for breaking, be refrigerated shortly after the time of lay. However, the timing of refrigeration under the FDA rule is incompatible with the process broiler eggs must follow as refrigeration of broiler eggs prevents them from hatching. Since the rule took effect, the broiler industry has been forced to discard these surplus eggs instead of sending them to breakers, costing the broiler industry tens of millions of dollars each year while unnecessarily keeping billions of eggs out of the egg breaking market.

Recent data from the USDA’s Food Safety and Inspection Service (FSIS) sampling program to identify *Salmonella* in egg products supports the fact that pasteurization is effective. For the one-year period of January 1, 2023, through December 31, 2023, FSIS collected 1,048 samples of processed liquid egg products from 43 establishments. None of the samples tested positive.

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for *Salmonella*. This indicates that the FSIS pasteurization process works.² These pasteurized egg products are used to manufacture breads, pasta, and other such products after being thoroughly pasteurized, thus killing any potentially harmful bacteria. NCC has asked repeatedly for these regulations to be changed given that there is no public health impact of allowing these eggs into the breaking market. Our requests have repeatedly been denied which has only further contributed to ongoing food waste.

USDA’s FSIS has proposed a draft *Salmonella* framework for poultry products. The Agency is considering a final product standard that would prohibit raw product from entering commerce should it contain *Salmonella* that is likely to make people sick.³ Not only would this framework be extremely costly to industry and consumers alike, but there are no known positive public health outcomes as a result of this framework, yet it assuredly will increase the amount of food waste. It is our understanding that the framework would require production facilities to test and hold product that is sampled by FSIS. Today, there is insufficient cold chain infrastructure, as mentioned in the draft Strategy. Fresh chicken has a limited shelf life, and obtaining sample results is far from instant. In fact, from the time of sample collection, shipping, sample analysis, and subsequent reporting back to the regulated establishment, four to six days may have lapsed. This will result in significant food waste with no positive impact on public health.

Regarding cold storage, as mentioned previously, holding product while the establishment waits for test results will be a significant challenge for the industry. Product would have to be moved into refrigerated storage until results are received. Today, no facility in the country has the cold storage space available to do this at scale. Multiple refrigerated trucks will be needed to accommodate the product in question. These trucks will then idle in parking lots, keeping product cool, releasing greenhouse gases for days. According to EPA, on average, a gallon of diesel fuel produces 22 pounds of carbon dioxide.⁴ A refrigerated trailer uses an average of ½ gallons of fuel per hour. If left running constantly, one refrigerated truck would emit over 4,000 pounds of carbon dioxide in a year. Based on the FSIS Meat, Poultry and Egg Product Inspection Directory there were 299 federally inspected chicken-producing establishments in the U.S.⁵ If we assume each of these establishments maintained ten refrigerated trailers on average, the industry would generate over 12 million pounds of carbon dioxide per year.

Not only is the environmental impact significant, but the framework will likely result in entire days of production being wasted, farmers having extended out times, delayed shipments of birds and chicks, and grocery stores being delayed fresh product. If the test comes back positive, the industry will be forced to either cook or render the product. Restaurants and consumers may find it difficult to purchase fresh chicken. Rendering facilities are already at capacity and would


likely not be able to keep up with the estimated increase in the product in need of rendering. This is a significant waste. As a low estimate, if just one percent of the over 46 billion pounds of chicken produced each year were sent to rendering, this would lead to over 460 million pounds of fresh chicken leaving the market annually.  

Overall, the *Salmonella* framework would greatly decrease the amount of chicken available for consumption. It would also lead to greater food insecurity, higher costs of products, and negative environmental impacts all of which are inconsistent with the Administration’s priorities. There are already ways in which the Agencies can reduce waste without looking for new ways of doing so.

**Conclusion**

The chicken industry does its part to reduce food waste but is committed to working even harder. As highlighted above, without spending additional resources, Agencies can take action to not only reduce waste but also decrease food prices while increasing their availability for consumers. By working cooperatively towards achieving this goal, innovative solutions can be found. However, any solution requires time and resources. Incentives and partnerships go a long way toward creating real change beyond education and recommendations, but economically supported policies that are meaningful to the consumers and organizations they affect. We appreciate the opportunity to provide comments on this draft Strategy and look forward to working with the Agency on these initiatives moving forward.

Thank you for your consideration, and please do not hesitate to contact me with any questions.

Respectfully submitted,

Ashley B. Peterson, Ph.D.  
Senior Vice President, Scientific and Regulatory Affairs  
National Chicken Council

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6 USDA National Agricultural Statistics Service, Statistics by Subject, Chilled and Frozen Young Chicken Production (pounds), 2022.