January 9, 2018

Director of Research
2017 Public Comment Period
Sustainability Accounting Standards Board
1045 Sansome St., Suite 450,
San Francisco, CA 94111

To the SASB Director of Research:

On behalf of the Natural Resources Defense Council (NRDC), I am pleased to submit the following comments on the 2017 SASB Exposure Draft Standards for the Food and Beverage Sector. The feedback provided below focuses on indicators and metrics related to antibiotics use in animal production, as presented in the Meat, Poultry and Dairy, Food Retailers & Distributors and Restaurants sections.

The NRDC is an international nonprofit environmental organization with more than 3 million members and online activists. Since 1970, our lawyers, scientists, and other environmental specialists have worked to protect the world’s natural resources, public health, and the environment. Since 2011, we have advocated to end the routine use of antibiotics in the livestock sector, because this practice breeds and spreads antibiotic resistant bacteria and compromises the effectiveness of antibiotics to treat human illness.

As you are likely aware, antibiotic resistance is one of the gravest public health threats in the world today. The Centers for Disease Control and Prevention conservatively estimates that at least 2 million Americans contract resistant infections each year; and at least 23,000 die from such infections. A recent report commissioned by the UK government estimates that by 2050, drug-resistant bacteria could kill 10 million people worldwide every year.

Despite this threat, many industrial farms continue to feed large quantities of antibiotics to livestock unnecessarily. In the U.S. alone, about 70 percent of medically important antibiotics are sold for use in food animals. In many cases, meat producers routinely give antibiotics to animals that aren’t sick to prevent disease brought on or spread by unsanitary and overcrowded conditions on industrial farms. The World Health Organization (WHO) just released new guidelines for the use of medically important antibiotics in food animals, calling for the elimination of all routine antibiotic use when animals are not
sick, whether the antibiotics are used to speed up growth (“growth promotion”) or to compensate for stressful or unsanitary conditions (“disease prevention”).

At the NRDC, we advocate for the public interest, and in particular for policy and market changes that will improve antibiotic stewardship by reducing the unnecessary use of antibiotics in livestock production. By doing so, we hope to curb antibiotic resistance and thereby, help ensure that antibiotics—particularly antibiotics that are used in both human medicine and in livestock production\(^1\)—remain effective for as long as possible to treat the sick people and animals who most need them.

For these reasons and more, we are pleased to see this important public health issue be prominently included in SASB’s accounting metrics. There is ever increasing global concern about antibiotic resistance, and especially the role that agricultural misuse and overuse of these precious drugs play in the spread of resistant bacteria from farms into communities.

Earlier this month, the U.S. FDA for the first time released data estimating species-level sales of antibiotics, revealing that the beef and pork industries together accounted for 80% of the medically-important drugs sold for use in food animal production. Meanwhile, investors around the world are paying closer attention to the antibiotics use policies and practices of large food companies, whether they are major buyers like restaurant chains or producers. The SASB metrics and indicators have the power to provide much needed data to benchmark and assess progress as the livestock industry shifts its practices toward responsible antibiotics use.

**Meat, Poultry & Dairy | Antibiotic Use in Animal Production (pgs. 68, 90, 91)**

To date, information about how antibiotics have been used in livestock or poultry supply chains has been scarce. Meat producers rarely address their antibiotic use other than in vague generalities. This has started to change in recent years as major companies like Perdue, Smithfield, and Tyson now provide some limited data on their antibiotic use. The industry norm is a lack of transparency around antibiotics. The opacity is troubling because it gives investors and the public very little information on which to base their decisions, whether buying stock or meat in the grocery aisle.

That said, two important signs of progress emerged in 2017: (1) For the first time, U.S. FDA released species-level data on sales of antibiotics for use in food animals and is contemplating a metric for reporting that data that would adjust antibiotic sales by the total weight of meat produced in the U.S.; (2) the City and County of San Francisco adopted an ordinance requiring all major grocery stores in its jurisdiction (including Costco, Safeway, Target and more) to report the antibiotic use policies and practices associated with all raw meat and poultry sold in their stores. Information reported will be

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\(^1\) Throughout this document, medically important antibiotics are defined as antibiotics that are the same as, or similar to, classes of drugs used in human medicine. For example, the livestock antibiotic Tylosin is a member of the medically important macrolide class of antibiotics.
made publicly available via the City’s website. Both efforts represent welcome turning points in transparency.

Given these developments, we urge SASB to consider shifting its accounting metric for reporting on antibiotic use from one based on “percent of production” to one that uses “mg of antibiotic active ingredient consumed per kg of animal weight produced (mg/kg).” Specifically, we urge use of the mg/PCU methodology developed within European Surveillance of Veterinary Antimicrobial Consumption (ESVAC) project of the European Medicines Agency (EMA). The “Population Correction Unit” or PCU in the denominator is a calculated estimate of animal weight in kilograms; it is derived from a country’s food animal population over a year, along with the estimated weight of each particular species at the time of antibiotics use. It is an estimate that allows for year over year comparisons to be made.²

Establishing an aligned approach between the SASB accounting metric and a metric already in use by government agencies around the world will allow for the most effective assessment of the gathered information. For example, the mg/PCU approach is currently in use in the European Union via their ESVAC project, as well as in Canada and the United Kingdom. This approach was also recommended as a best practice earlier this year by the Expert Commission on Addressing the Contribution of Livestock to the Antibiotic Resistance Crisis, comprised of 12 infectious disease physicians, microbiologists, pediatricians, as well as five veterinarians.³ The U.S. FDA is also exploring a similar concept. And in fact, Smithfield, one of the largest pork producers in the world, is already reporting a similar metric for the company’s antibiotics use in their annual sustainability report, and the British grocery retailer Marks & Spencer became the first major retailer in the UK to publish antibiotics use data from its supply chain on December 20, 2017. Marks & Spencer provides this use information in mg/PCU form.

With that metric format in mind, we recommend that this Standard ask livestock producers to provide data for two categories of antimicrobials:

(1) **Medically-important antibiotics**, as defined by the 2017 *WHO list of critically important antimicrobials* (rather than FDA’s Guidance for Industry #152 as is currently referenced in the standard).⁴ The WHO list encompasses slightly more drugs; is used across the globe and is more frequently updated. Global restaurant companies that set voluntary antibiotics policies also use the WHO list (McDonald’s and Yum! Brands are leading examples).

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² For more information on the PCU concept, see pages 9-10 of this document


⁴ http://www.who.int/foodsafety/publications/cia2017.pdf?ua=1
(2) **Non-medically important antibiotics**, which including ionophores, avilamycin, novobiocin, bambermycin, etc.).

Collection of data across both medically-important and non-medically important categories aligns with the method used by the U.S. FDA, ESVAC, and agencies in Denmark and the Netherlands.

We advise eliminating the “non-therapeutic” accounting metric category in the next version of the standard. To retain it is likely to create unnecessary confusion, since this term is inconsistently defined and used. For example, SASB defines “non-therapeutic” on p.91 to encompass the routine use of antibiotics for disease prevention and other routine purposes. Unfortunately, in its Guidance 209, the FDA re-defined “non-therapeutic use” to mean production or growth promotion uses only. Later, in Guidance 213, the agency went on to define all other antibiotics uses – including risky “routine disease prevention” use – as therapeutic.\(^5\) This has rendered the term “non-therapeutic” a less useful frame, and a potentially counter-productive one, for distinguishing responsible and irresponsible antibiotics use practices.

Going forward, SASB should require companies to report their overall annual antimicrobial use per species in mg/PCU form. In addition, the companies should report the subset of mg/PCU solely for medically important antibiotics, for each of these categories:

1. Growth promotion  
2. Disease prevention  
3. Disease Control  
4. Treatment

These data sets will offer the most comprehensive glimpse into a company’s (or their suppliers’) antibiotics use practices, especially when meat is produced in countries where there are no policies or restrictions in place (the U.S. and the European Union have banned growth promotion uses of medically important antibiotics). This information, will allow investors and consumers to easily track company progress over time.

**Meat, Poultry and Dairy | Animal Care & Welfare (p. 92-93):**

In section FB0102-20 (Percentage of production certified to a third-party animal welfare standard), we recommend the following amendments:

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\(^5\) FDA Guidance 213, Accessed December 2017  
• **Section .83:** Include dairy production in the list of livestock industries covered; ask producers to provide copies of company policies governing antibiotic use restrictions across their meat and poultry lines and specify any reduction goals made as well as progress in meeting those goals.

• **Section .84:** Remove American Humane Certified from this section and throughout the SASB Standards. American Humane Certified is not considered a meaningful label by the ASPCA nor by Greener Choices (run by Consumer Reports).\(^6\) American Humane Certified allows for routine prevention uses, which as noted goes against the WHO recently updated recommendations.

Meat, Poultry and Dairy | Environmental & Social Impacts of Animal Supply Chains (p.94-96):

In section FB0102-23 (Percentage of supplier and contract production facilities verified to meet animal welfare standards), we recommend the following amendments:

• **Section .92:** Include dairy production in the list of livestock industries covered; ask producers to provide copies of company policies governing antibiotic use restrictions across their meat and poultry lines and specify any reduction goals made as well as progress in meeting those goals.

• **Section .94:** Remove American Humane Certified from this list in this section and throughout the SASB Standards. American Humane Certified is not considered a meaningful label by the ASPCA nor by Greener Choices (run by Consumer Reports).\(^7\) American Humane Certified allows for routine prevention uses, which goes against WHO recommendations. For consistency, clarity and ease of compliance, we also recommend aligning the standards listed in this section with those in section FB0501-15/.70 of the Supply Chain Management & Food Sourcing indicator (p. 286).

Food Retailers & Distributors | Management of Environmental & Social Impacts in the Supply Chain (p. 250-252)

In Fall 2017, the City and County of San Francisco adopted an ordinance that will ask all major retailers in its jurisdiction to disclose information on the antibiotics use practices associated with the all lines of raw meat and poultry sold in their stores. The reporting requirements, currently under development, will address information about the different purposes for which antibiotics are used by producers, whether the antibiotic use is certified by a third-party, the number of animals raised, and the total volume of antibiotics administered. We think it will be worthwhile for SASB to track the progress of this effort and incorporate elements into SASB Food Retailers & Distributors standards in the future. As noted earlier,

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\(^6\) GreenerChoices.org – American Humane Certified; accessed December 2017
http://greenerchoices.org/2017/01/11/american-humane-certified/

\(^7\) Ibid.
and related in spirit to San Francisco’s new ordinance, Marks & Spencer recently became the first grocery retailer in the UK to publicly disclose the antibiotics use data of its suppliers.

In section FB0401-20 (Discussion of strategy to manage environmental and social risks within the supply chain), we recommend the following amendments:

- **Section .92:** Ask companies to explicitly address how their meat, poultry and dairy suppliers are handling the risk posed by the global threat of antibiotic resistance, and the associated loss of efficacy of these drugs on industrial farms. Given recent policies released by the World Health Organization, as well as state and local measures in the U.S., a reliance on routine antibiotics use leads to supply chain vulnerability and puts producers - and their food retail customers – at a material risk. For example, an on-farm outbreak of a resistant infection could threaten animal health and create unexpected supply limitations. Similarly, an outbreak of contaminated raw meat or poultry contamination poses a significant public health threat, as transpired in 2013 with Foster Farms chicken on the West Coast.

Further regulatory scrutiny of irresponsible use practices is to be expected in the future. Meanwhile, consumer trends indicate an increasing interest in and willingness to pay for meat and poultry raised with responsible antibiotics use practices, and sales of such products are rapidly rising. Retailers with strong policies in place restricting routine use of antibiotics will be better positioned as leaders relative to their peers, and potentially create better long-term value and less risk for investors.

**Restaurants | Supply Chain Management & Food Sourcing (p.284-286):**

We recommend that this Standard require restaurants to report their suppliers’ annual antibiotics use, as well as to set reductions goals for their own supply chains that can be benchmarked over time.

Companies should require their suppliers to report their overall annual antimicrobial use per species in mg/PCU form. In addition, the companies should report the subset of mg/PCU solely for medically important antibiotics, for each of these categories:

1. Growth promotion
2. Disease prevention
3. Disease Control
4. Treatment

In section FB0501-15 (Percentage of food purchased that meets environmental and social sourcing standards, percentage third-party certified), we recommend the following amendments:

- **Section .61:** Remove the Global Roundtable for Sustainable Beef from the list of acceptable food sourcing standards. While there is some limited support in the environmental community for
the GRSB, there is also widespread concern among public health, public interest, and sustainable agriculture groups about the integrity of this standard. NRDC’s perspective on the GRSB can be found here. Consumer Reports, Food and Water Watch, and Friends of the Earth outlined concerns in a letter to Roundtable leaders submitted in November 2014.

In short, though we applaud the effort to address and acknowledge sustainability related to beef production, we believe that the GRSB is not a credible framework for verified sustainable beef production and does not represent “best practice” for food sourcing. The GRSB Principles and Criteria do not meaningfully address or mitigate the climate impact of beef production; they completely fail to tackle the misuse of antibiotics and other drugs use in beef production; and fall short on water conservation, to name a few problems. These and other critical flaws mean that the GRSB’s framework cannot serve as a credible sustainability program. In fact, by failing to address many fundamental problems associated with livestock production on a global scale, the GRSB’s Principles and Criteria run the risk of passing off business as usual practices as “sustainable.”

- **Section .69**: Include dairy production in the list of livestock industries covered; ask producers to provide copies of company policies governing antibiotic use restrictions across their meat and poultry lines and specify any reduction goals made as well as progress in meeting those goals.

- **Section .70**: Humane Farm Animal Care is the NGO that oversees the Certified Humane welfare standard. It doesn’t need to be listed separately here. For consistency, clarity and ease of compliance, we also recommend aligning the standards listed in this section with those in section FB0102-20/.83 of the Animal Care & Welfare indicator (p. 93).

In section FB0501-17 (Discussion of strategy to manage environmental and social risks within the supply chain), we recommend the following amendments:

- **Section .71**: Ask companies to explicitly address how their meat, poultry and dairy suppliers are handling the risk posed by the global threat of antibiotic resistance, and the associated loss of efficacy of these drugs on industrial farms. Given recent policies released by the World Health Organization, as well as state and local measures in the U.S., a reliance on routine antibiotics use leads to supply chain vulnerability and puts producers - and their restaurant sector customers – at a material risk. For example, an on-farm outbreak of a resistant infection could threaten

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animal health and create unexpected supply limitations. Similarly, an outbreak of contaminated raw meat or poultry contamination poses a significant public health threat, as transpired in 2013 with Foster Farms chicken on the West Coast.

Further regulatory scrutiny of irresponsible use practices is to be expected in the future. Meanwhile, consumer trends indicate an increasing interest in and willingness to pay for meat and poultry products raised with responsible antibiotics use practices. Antibiotics policies and practices of top global restaurant chains are evaluated annually by NRDC and allied groups in the Chain Reaction Scorecard, which ranks the leaders and laggards of this industry. Restaurants with strong policies in place restricting routine use of antibiotics will be better positioned as leaders relative to their peers, and potentially create better value and less risk for investors.

Thank you for your consideration of these comments. The NRDC antibiotics team would be more than happy to meet with SASB staff in the new year to discuss these recommendations in more detail. I can be reached at 415.876.6100 or at lbrook@nrdc.org.

Sincerely,

Lena Brook
Policy Advocate
Food and Agriculture Program

10 Restaurant Chains Fail on Beef & Pork Policies, NRDC.org; accessed December 2017
Understanding the Population Correction Unit used to calculate antibiotic use in food-producing animals.

December 2016

Estimated weight at time of treatment

When estimating the average weights at time of treatment the EMA takes into account that the majority of antibiotics are used in young animals. Therefore, weight used is likely to be below final weight at slaughter.

<table>
<thead>
<tr>
<th>Animal Type</th>
<th>Estimated Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slaughter cows</td>
<td>425</td>
</tr>
<tr>
<td>Slaughter heifers</td>
<td>200</td>
</tr>
<tr>
<td>Slaughter bullocks and bulls</td>
<td>425</td>
</tr>
<tr>
<td>Slaughter calves &amp; young cattle</td>
<td>140</td>
</tr>
<tr>
<td>Imported/exported cattle for slaughter</td>
<td>425</td>
</tr>
<tr>
<td>Imported/exported for fattening</td>
<td>140</td>
</tr>
<tr>
<td>Livestock dairy cows</td>
<td>425</td>
</tr>
<tr>
<td>Slaughter pigs</td>
<td>65</td>
</tr>
<tr>
<td>Imported/exported pigs for slaughter</td>
<td>65</td>
</tr>
<tr>
<td>Imported/exported pigs for fattening</td>
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<tr>
<td>Livestock sows</td>
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<tr>
<td>Slaughter turkeys</td>
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</tr>
<tr>
<td>Imported/exported poultry for slaughter</td>
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</tr>
<tr>
<td>Slaughter sheep &amp; goats</td>
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</tr>
<tr>
<td>Imported/exported sheep &amp; goats for slaughter</td>
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</tr>
<tr>
<td>Livestock sheep</td>
<td>75</td>
</tr>
<tr>
<td>Living horses</td>
<td>400</td>
</tr>
<tr>
<td>Slaughtered fish based on liveweight</td>
<td>- -</td>
</tr>
<tr>
<td>Slaughter rabbits</td>
<td>1.4</td>
</tr>
</tbody>
</table>
What is the PCU?

The Population Correction Unit (PCU) is a theoretical unit of measurement developed by the European Medicines Agency (EMA) in 2009 and adopted across Europe. It takes into account a country’s animal population over a year, along with the estimated weight of each particular species at the time of treatment with antibiotics. Although it is an estimation it does enable year-on-year comparisons to be made and trends to be seen.

What is the PCU figure?

The standardised average weight in kilograms (kg) of all animals at time of treatment multiplied by the number of animals based on national statistics (live and/or slaughter).

Data on national statistics are used for each calendar year

The EMA set a standardised estimated weight at time of treatment for each species

Adjustments are made to take into account animals exported to, and imported from, other European countries

Companion animals are not included in the calculation

What is the mg figure?

The active ingredient weight in milligrams (mg) of all antibiotic products sold in the UK (calculated from product data sheets).

Sales data are reported as quantity of active ingredient sold in a calendar year and converted to mg

Products for horses are included as they are considered by the EMA to be a food-producing species

Topical presentations are removed as their contribution to total amount is minimal

Tablets are removed as they are used primarily in companion animals

What calculation is used?

1 PCU = 1 kg. For example a 50 mg/PCU figure for food producing animals would mean that on average, and over the course of a year, 50 mg of antibiotic active ingredient was used for every kg of bodyweight at time of treatment.

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\frac{\text{xx mg}}{\text{xx kg}} = \text{xx mg/PCU}
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