Supplemental Questions and Answers

1. At the hearing, you noted MSD Animal Health's research with the South Australian Research and Development Institute (SARDI) on sheep (uncorrected transcript, page 25). Can you provide more details on the progress and findings of that research? When is virtual stock fencing likely to be commercially-viable for sheep?

Vence participated in the research study project with the South Australian Research Development Institute in 2022 and 2023, and there has been no further research with SARDI post-study. Based on the results of that study, our conclusion was that for a commercially viable collar for use in sheep, there were several different considerations that we would need to examine further, including configuration of a more appropriate collar and adjustment of the stimulus profile. For MSD Animal Health, we do not have an estimated timeline for a product that would meet these dimensions, but welcome continued opportunities to further engage in studies or pilot projects for sheep.

2. What data or feedback does MSD Animal Health collect from its users to monitor animal welfare and/or improve its devices?

A key part of the continued success of this technology is utilization of the data to better understand the response of the animal to the use of virtual fencing. As it relates to Vence, our Herd Manager Application gathers extensive data from the Cattle Rider Collars and the producers use of the application to manage their herd. The current version of Herd Manager provides feedback related to animal welfare mechanisms built into the collar (e.g. pressure zone disable). Future versions of Herd Manager will incorporate AI algorithms to provide more detailed insights to both the user and the company for continuous improvement of the solution. AI algorithms under development include virtual fence efficacy analysis and animal pressure analysis. These metrics will enable the technology to be optimized for animal welfare, improve customer training and utilization of the technology, and improve overall outcomes for the customer operation.

Additionally, we are speaking to customers on a daily or weekly basis and receiving feedback about how the product is working for them and what improvements we can make to it. We have a formal process to analyze this feedback and then create 'tickets' for the technology team to add / delete / improve features to the interface or future hardware.

3.   Has MSD Animal Health received any reports of animal welfare issues with virtual stock fencing devices from its users, and what action do you take when you receive a report?

We work with producers utilizing the Vence product to monitor animal welfare concerns, including adverse reactions. MSD operates in over 100 countries globally so our policy is to check and conform to local state and federal regulations related to field and research activities. Additionally, each of our customers has a "customer care manager" who they can reach out to directly with any issues related to the technology. The customer care manager will then determine the appropriate customer care service response, whether it's direct interaction or a need for additional assistance from the broader MSD Animal Health team.

Animal health and welfare is a core commitment of MSD Animal Health and we take that responsibility very seriously.

A recent example related to our work in Australia involves the research trial at Rio Tinto Hamersley Station. During that trial, collar abrasion was closely monitored by station staff as collar fit is a animal welfare concern for the animals. As part of that monitoring process with research staff, we established a protocol that included the following:

- *Adverse observations were reported to the research team's "Animal Welfare Committee". This is the group that provided approval for Rio Tinto to proceed with the trials ahead of regulatory changes.*
- *Adverse observations resulted in detailed action plans which were managed by a team lead who had taken animal welfare training in order to participate in the research. Actions plans included:*
  - *Increased monitoring for a period of time.*
  - *Product level feedback from Vence to Rio Tinto including both collar and Herd Manager.*
  - *Mitigation plan should further observations be observed (e.g. "action plan" to remove collar).*

4. A recent United Kingdom government report identified potential risks of different dynamic grazing and herding methods, such as back fencing or virtual herding.1 In your experience, are there methods of moving or fencing animals with virtual fencing that pose risks to animal welfare? What regulations or guidance could be put in place to mitigate these risks?

We would reiterate our comments from the hearing, that we view virtual fencing as reducing risks related to animal welfare and not increasing them (or posing risks). As it relates to guidance on use of virtual fencing products, it's important to remember that these technologies are constantly changing and adapting. Key to the utilization of these products is the appropriate training of the producers to fully understand the products and how they should be utilized to ensure the health and welfare of the animals. Additionally, continued dialogue with the appropriate state and local officials to provide opportunities for ongoing education and other resources on best practices would be recommended for users of the product.