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**Re: Starlite Colony – Technical Review
Public Comment Response**

In support of the Technical Review the following responses have been prepared to comments and concerns expressed by residents neighbouring the proposed operation.

Dale and Carol Fossay -

The supportive comments of Dale and Carol are greatly appreciated. Extensive efforts have been made by the colony over its history to respect and live in harmony with their neighbours. The support of the Fossay's reinforce the fact that the colony's efforts have been noticed and appreciated.

Timothy and Tanis Kendall -

Odour concerns are a significant factor in livestock production and some level of odour production is unfortunately inevitable. Significant and costly measures have been implemented in the past to mitigate the odour production and impacts on neighbouring residents from the earthen manure storage used to store manure produced from the hog operation. A synthetic cover had been installed on the primary cell of the earthen storage at considerable cost with the intent of capturing and utilizing the collected gases. Unfortunately after several years of trying to operate the collection system it was deemed ineffective due to poor gas production during a significant portion of the year. Several years later the synthetic cover had deteriorate and became ineffective for odour control. Since that time, straw covering has been utilized on the primary and secondary cells of the storage. The application of the straw cover is employed in the spring of each year after the ice cover has melted. Intermittent touch ups during the summer have been done in the past when winds or storms have impacted the floating straw layer.

In addition to the straw cover that is installed each year, enzyme have been added to the feed and directly to the in-barn collection pits as a means to reduce odour production as well. Shelterbelt trees were planted and maintained over the years. Still in their growth stage, the full effect of the shelterbelt trees have not been realized. As the trees grow it is anticipated that their effectiveness will continue to increase over time.

The proposed broiler barn will have no impact on the existing earthen manure storage as the manure will be handled as a solid instead of a liquid. As a mixture of straw bedding and manure, the potential for odour production from the proposed operation is expected to be minimal and significantly less pungent than liquid

manure. Frequent removal of manure between batches of birds will minimize the potential for anaerobic decomposition which is main contributor to odour production. Once removed from the barn, the manure will be stockpiled and aerated several times throughout the decomposition process to further reduce the potential for offensive odours. This composting process will also alleviate odour production commonly associated with field application. If the composting process has been effective, the end product that is field applied is inert and should not produce any noticeable odours. Incorporation of the manure into the soil using cultivation equipment will further minimize the potential for odours.

Brenda Borley and Greg Shirtliff -

The support of Brenda and Greg is appreciated by the colony. The colony would like to express their intent to mitigate nuisance odours as much as possible as these odours are not only offensive to neighbours but equally offensive to the colony themselves. Measures to mitigate odour production are as outlined in the response above for Timothy and Tanis Kendall.

Gail -

To clarify, the proposed operation is for the addition of broiler chickens. These birds will be confined to the production facility and will not have any access to the outdoors nor any surface water sources. Manure from the proposed operation will be composted and field applied at agronomic rates suitable to the crops to be grown. The field application of manure will be administered through a manure management plan that is filed with the Province on an annual basis. The volume of manure applied per acre is determined based on the nutrient content of the manure and soil test results for the fields that will receive the manure such that the nutrients are applied at rates similar to that which the crop will remove. Intermittent auditing by the province ensures compliance with the manure management plan to prevent over application.

Shortly after surface application the manure will be incorporated into the soil in order to minimize the potential for nutrients to escape into the environment and impact downstream surface water sources. Unlike discharges of treated sewage from domestic sources such as the City of Winnipeg into water bodies, it is intended to utilize the nutrients within the manure to sustain crop production instead of being released to the environment. For this reason, it is not intended to provide any treatment to the manure produced.

Larry Trudeau –

Confined river aquifers consisting of shallow sand and gravel layers or pockets are more susceptible to fluctuations in water levels in comparison with deep bedrock aquifers in other regions of the province. Recharge rates in this case are directly dependent on water levels and available flow within the river to which these aquifers are connected. Given the shallow elevation of Mr. Trudeau's well, it is not unreasonable to expect that water availability will be impacted by a larger user such as Starlite Colony, particularly during low flow periods in the river. The drought conditions experienced in 2021 has made the colony aware that under such extreme conditions their current water supply is maximized and is unable to supply additional demand such as that required to support the proposed operation. Based on this realization

the colony has decided to utilize rural water to supply the proposed operation and thereby eliminate any further demand on their existing wells. It is also proposed to begin establishment of a water dugout as part of the new development. This water source will be utilized to substitute water that would otherwise be drawn from the wells to further reduce the demand on the existing wells. Replenishment of the water within the dugout will be facilitated through surface runoff. A water rights license will be procured to facilitate any withdrawal of water from municipal or provincial surface water sources. Runoff from the colony's own property will be directed to the dugout as the primary source of recharge.

I trust the responses provided adequately address the concerns expressed and demonstrates that the colony is willing to make significant efforts to avoid conflicts and impacts on their neighbours. Ultimately, their goal is to have as little impact on the community and surrounding neighbours as practically feasible, yet still have the ability to grow to support their families. In the absence of any significant manufacturing or commercial enterprise on site, agriculture and particularly livestock production is the most viable method to achieve this growth as increasing land base for crop production is limited within the region.

Respectfully Submitted,

South-Man Engineering

Per, 

Peter Grieger, P. Eng