March 29, 2016

Good morning,

I am Peter Burmeister. My family and I operate a VOF/USDA certified organic livestock and poultry farm in Berlin, VT as well as a Vermont state inspected, VOF/USDA certified organic poultry slaughter and processing facility. I proudly serve as a member of the Board of Directors of Rural Vermont, a statewide farmer advocacy organization with more than 1000 members, and am a member of its Policy Committee. Although I am affiliated with that organization, I speak today on my own behalf.

I am also an Adjunct Faculty member at Norwich University, where I teach business ethics. I mention this because the subject at hand, Act 64 and the associated proposed required agricultural practices (RAP's) are essentially an effort to address important ethical issues.

As a small farmer in Vermont, I have observed with growing concern the efforts being made by the Legislature and the Agency of Agriculture, Food and Markets to regulate farming practices that contribute to the degradation of lakes and feeder waterways throughout the state.

My apprehension includes several key components. I fear that the stipulations in the Act are inadequate to stem phosphate runoff, and that the proposed Practices will lead to severe unintended consequences, while proving to be both expensive and largely ineffective in achieving the goal of "clean water."

- The Act and the Practices fail to address the most critical agricultural method that leads to water quality degradation. That is the annual cultivation of a single crop, silage corn, adjacent to lakes, streams and rivers. Because corn has been grown in the same fields every year, for as long as a century in some instances, the natural fertility of the soil has been thoroughly depleted. In order to continue to produce a viable crop, liquid manure and chemical fertilizers are widely disseminated to make up for the deficiency of phosphorous and other nutrients. After the corn crop is harvested, the majority of the fields remain bare throughout the winter and spring, resulting in the runoff of polluting substances. It is unfortunate that the Legislation and the Practices do not consider silage corn monoculture as a significant culprit.
- One of the provisions in the Act and the RAP's calls for buffers between cultivated fields and adjacent waterways. Although on the face of it, this might appear to be a practical partial solution to runoff, it will bring about an unintended consequence that is an equally serious problem. In various areas of the state, we have significant issues with invasive species. In the Dog River

Valley, where I live and farm, and along the Winooski, we are plagued with Japanese knotweed. Elsewhere there are phragmites, and bedstraw, to name just a few. The most effective way to eliminate these invasive plants is by grazing. Although livestock exclusion from waterways might appear to be a "no-brainer," controlled rotational grazing for brief periods of time would contribute far less pollution than the monoculture cultivation of silage corn. while simultaneously eliminating the alien plahts. The occasional deposit of livestock excrement in a stream merely mimics natural processes that precede civilization by hundreds of thousands of years. Prior to the advent of agriculture, waterways were not polluted, even though wild animals used lakes and streams as their sole source for drinking water, as they continue to do in wilderness areas today. Instead of buffer zones, farms in areas where invasives are a problem should be incentivized to rotationally graze right up to the river banks, thereby eliminating unwanted vegetation in favor of indigenous plants that will help to reduce erosion and restore a natural balance. Sunset provisions related to this practice would prevent overgrazing, followed by re-seeding with species that are native to the region. The result would be the restoration of stream banks and a significant reduction in erosion.

- A relatively recent movement in Vermont and elsewhere worldwide currently seeks to correct the depletion of the soil through practices known as "Regenerative Agriculture," and "Carbon Farming." Some of the highlights of these methods involve crop rotation, cover cropping and undersowing. Although some Vermont farms practice one or more of these, their use is not currently widespread. Many of our largest dairy farms do not make use of any of these techniques.
- Any serious effort to correct the problems associated with agricultural runoff needs to include the approaches mentioned above. The "band-aid" of regulations proposed in the Act and the Practices will only minimally ameliorate the problem; will prove to be both costly and ineffective; will create an atmosphere of distrust between government and the agricultural community and will inevitably lead to a culture of evasion and "cheating." Inspection once each decade or every seven years cannot begin to insure that destructive practices do not continue in between inspector visits.
- One has only to consider the example of the "War on Drugs" to see how "feel good" ineffective draconian regulations, combined with expensive enforcement mechanisms, fail to be effective means of solving a serious problem. Instead of hiring a force of inspectors to drive around the state, emitting pollution into the atmosphere in an effort to regulate more than 7000 farms, I suggest consideration of incentive programs to enable farms to curtail their most destructive agricultural practices in favor of those that will regenerate the soil, while reducing or eliminating agricultural pollution at its

source. As an element of the incentive effort, property owners could be required to self-report their practices, accompanied by photographic proof of compliance. This would greatly reduce the need for inspection and its associated costs, which could then be earmarked for financial remuneration to those that comply.

Some advocates for Act 64 and the RAP's have indicated their preference for even more regulation than is stipulated in those documents. Though well-intentioned, the impetus for more oversight and stricter enforcement will ultimately prove to achieve far less than the desired results. Offering "carrots" instead of "sticks" will be more effective.

For all these reasons, I vigorously recommend that the Legislature agree to postpone implementation of the RAP's in order to allow for further study, to solicit further public input, and to prepare a revised set of Practices that will be more helpful in the long run. Because we are about to enter into the most intensive months for agriculture, that deadline should be extended to the end of 2016. If the extension is for less time most of the state's farmers will not be able to expend the time and energy necessary to make useful suggestions for amending Act 64 and the RAP's. To do otherwise would be patently unfair to the hard-working and often marginally profitable farmers of Vermont.

At the beginning of my remarks I mentioned ethics. It is my firm belief that the only ethical way to address water quality in Vermont is to take into account the very essence of the way farming has evolved. Monoculture corn has no virtue except as an expedient way to nourish dairy cattle and increase milk production. It robs the soil of nature's legacy and the requirement for fertilization is the major contributor to phosphate pollution. As responsible stewards of the water and the land, we need to look at significant changes. Act 64 and the Practices associated with it represent an opportunity to move Vermont agriculture in a positive direction but they are incomplete. To enact them in their present form would be simply unethical.

Thank you for your time and attention. I hope you will consider my position on these matters and take action before the end of the current Legislative session.