Justification for Fiscal Impact Statement regarding

additional staff needed to evaluate exemption requests.

Impact of H706 exemption provision (Sec. 3, 1105(b) b).

H706 as passed by the House contains a provision that allows the Secretary to issue an order exempting specific seed products from the prohibition on sale and use. The exemption process envisioned in H706 requires detailed evaluation of the seed market and a determination of undue economic harm or the unavailability of untreated seed, as well as an evaluation as to whether the use of non- neonicotinoid treated seed (non-NTS) will cause undue harm to pollinators, birds, human health, or the ecosystem. The terms "detailed evaluation" and "undue harm" are not defined. These determinations must be made by the Agency.

This provision creates a substantial work load for the Agency. The evaluations and determinations will have to be undertaken even if there is a single request for an exemption.

The Agency would also be obligated to evaluate the availability of non-NTS and the economic impact on the use of non-NTS if this exemption process is enacted. The Agency could inadvertently cause harm without a rigorous analysis because if there was an economic impact from the use of non-NTS seed and the risk was not mitigated, the people and economy of Vermont would be harmed.

If there is a determination that there could be economic injury or that non-NTS are unavailable, then the Agency will be required to evaluate the potential harm to pollinators, birds, human health, or the ecosystem. Although the EPA has already conducted such an evaluation as part of the risk assessment process for the two primary seed protectant neonicotinoids (clothianidin and thiamethoxam) and determined that their use is appropriate, the Agency would have to repeat and ostensibly expand on this analysis to meet the goals of the legislation.

These evaluations and determinations will be inherently resource intensive and time consuming for the Agency due to the amount of information to be collected and evaluated. Expertise in the areas of agronomy, agricultural economics, environmental toxicology, wildlife (birds) ecology, overall ecology, and human health will be needed, either as employees within the Agency, or contracted as services to the Agency.

It should be noted that EPA is charged with performing this analysis for the nation and completed a final risk assessment for thiamethoxam and clothianidin (the primary neonicotinoid seed treatments) and concluded that their use as seed treatments does not pose an unreasonable risk. It is anticipated that the evaluation required by the legislation cannot simply rely on EPA's analysis but must instead consider factors particular to Vermont. This will require evaluation of pertinent research, perhaps the need to sponsor research, and evaluation of the particulars of each request. Unlike the process being developed in New York, the burden of performing these fact-specific evaluations falls on the Agency.

The Agency is also likely to be challenged by any persons not satisfied with the level of "detailed evaluation" or determination of lack of "undue harm". Also, if an exemption is not granted, the

Agency may be sued by farmers or golf course operators who sustain damage due to pests that could have been controlled through the use of neonicotinoids.

Comparison with NY Legislation (s8031NY)

The legislation to prohibit the use of NTS in New York establishes an entirely different process to allow use of neonicotinoid treated seed (NTS) when needed by growers. That legislation allows the State to issue waivers if farmers have integrated pest management training and a farmer's pest risk assessment concludes that there is sufficient risk to allow the use of NTS. This process is to be established in rule. This allows for the adoption of a science-based risk assessment process that is transparent and predictable for growers and seed distributors. Growers can request a waiver if they make the determination that NTS seeds are needed in their production process. The Agency can then apply the adopted rule to grant or deny the waiver. There is no related requirement to separately evaluate the potential risk to pollinators, birds, the ecosystem, or human health.

This process is inherently more predictable and less time and resource consuming than the exemption process outlined in H706 as passed.

Cornell University has begun the research needed to quantify the pest risk associated with cropping practices. UVM can collaborate and learn from this research and inform the development of a similar risk assessment in Vermont.

Comparison with Quebec NTS provisions

During some previous discussion of this topic, it has been noted that there were relatively few requests in Quebec for continued use of neonicotinoid treated seed (NTS) after the restrictions on their use were put in place. It was argued that this could be an indication of the level of need for exemptions as provided in H706.

The exemption provision in H706 is entirely different than the process adopted in Quebec to allow use of NTS, and the two systems should not be compared to determine the potential workload for the Agency because of this legislation.

In Quebec, farmers may request to use NTS if they obtain a determination from a certified agronomist of the need for the use of the seeds to protect their crop. The grower must contract with a certified agronomist, who then performs this evaluation for that grower. The agronomist must issue a prescription of the use of the seed. Under the prescription NTS can be used on the particular parcel included in prescription for one year. There is no requirement for an evaluation of the state of the seed market, or of potential harm to pollinators, birds, human health, or the ecosystem.

The number of requests for this has been low due to the difficulty of obtaining this type of determination from certified agronomists, primarily due to the few agronomists available to conduct this service. In addition, farmers in Quebec were provided a payment of \$18Canadian per acre to transition away from the use of NTS, providing an incentive for that transition.

Importantly, the value of comparing ourselves to Quebec is limited since Quebec farmers have access to viable alternatives in diamide-treated seed, We also understand that their farmers

primarily grow grain and are able to plant later in the season when the soil is warmer and the pest prevalence diminished.

Quebec is a much bigger market than Vermont and comprises a large share of the Canadian agricultural economy. Seed manufacturers made diamide treated seeds available in Quebec and its more than 8M residents but given that all 50 US States currently allow NTS, we do not know whether effective alternatives will be available to Vermont farmers—who grow only 1/1000th of US corn in a State with only 0.2% of the US population. NY grows about 11x more corn than Vermont in a State with 20M residents, but we do not know how or whether seed producers will supply the NY market or how Vermont's smaller farms will fare in a limited 2-State market where Vermont farmers comprise less than 10% of the overall demand for non-NTS. Combined, NY and VT plant a little more than 1% of the nation's corn acreage. Presumably, the 48 State/99% corn seed market will predominate, and NY and VT will not compete on equal footing with other US farmers. Given the international border and trade regulations, it's not at all clear that Vermont farmers will have access to the seed used in Quebec.

For these reasons and others, the Agricultural Innovation Board recommended further study and other measures to protect bees.