

Food Standards Australia New Zealand Australia

Sub: Submission P1052 Primary Production and Processing Requirements for Horticulture (Berries, Leafy Vegetables and Melons)

Date: 15/02/2022

Background:

Tripod farmers grow leafy vegetables and is a major supplier of pre-packaged salads to the supermarket retail sector. The farming operations of Tripod are at Bacchus Marsh and Boisdale Victoria at various small to medium sized farms. The company is a vertically integrated entity and in addition to its primary production facilities has a central processing plant for the preparation and production of a variety of retail and wholesale salad products. The directors of Tripod are in general agreement with the contents of P1052 and the current compliance standards operated by Tripod are not too far removed from those proposed. However, there are some significant areas of concern which do not appear to have been considered or adequately addressed in the supporting documents for P1025. This submission attempts to highlight what we believe are areas of the proposal that will have a significant negative impact on businesses if not addressed correctly.

Key Concerns for the industry

1. The new proposed standard places a significant emphasis on pre-harvest water quality, the requirements to monitor, undertake risk assessments including the impact of adverse weather events and flooding on water quality. We are not in disagreement with the need for this approach or to underplay the microbiological risks associated with contaminated water. However, there is a need to develop solutions for the water quality issues faced by the industry. Governments and Water Authorities have a major role to play in improving access to quality water sources.

Tripod over the last two years has undertaken risk assessments for some of its water sources, including comparative microbiological quality of its major water source before and after adverse weather events. As would be predicted a very significant percentage of water samples post heavy rains are highly contaminated and thus rendering the water of an unsuitable quality for irrigation. We are of the view that this is a relatively well-known phenomenon and no secret in the industry, particularly amongst major players.

There is usually a lag following rain before microbiological quality deteriorates in a river water source. Likewise, water quality can remain unacceptable well after the rains have ceased. Bore waters do not suffer from the same issues as river sources.

The issue that is raised is; **What can any farm actually do about it?**

2. The options during these events which can be relatively frequent are:
 - i) Stop irrigating the crops even if they require irrigation and let them die or deteriorate to a non-commercial quality.
 - ii) Set up some form of water disinfection treatment at each farm site that would operate during these adverse periods.
 - iii) Construct water dams or polishing ponds at the expense of reducing horticultural land, with sufficient water capacity to get through such periods.
 - iv) Develop alternative water sources such as bore water.
3. River water supplies are managed by Water Authorities. Such organizations do not take any responsibility for the microbiological specification of the water being sold. It is highly likely that the Water Authorities do not differentiate between water for ready-to-eat vegetables versus other horticultural applications. In respect of our local water authorities, they do not undertake any microbiological surveillance of the water.
4. Despite a long-term understanding and a plethora of scientific literature on the impact of water quality there appears to be very limited research on practical solutions to the problems raised above.
5. The cost analysis paper associated with P1052 (Document 3) does not adequately address the costs associated with water treatment and testing, in particularly treatment costs and the additional testing required to perform risk assessments on water sources. To be kind it is fair to say that document 3 shows an extremely naïve approach to costing. It demonstrates a relatively poor understanding of how farms operate which will become evident in the next section of this submission.
6. The new requirements will prohibit the use of untreated manures and wastes to fertilize soils on which leafy vegetables are to be grown. At present there appears to be a significant shortage of treated and composted waste. The shortage of manures has been further exacerbated by the rising costs of nitrogen fertilizers resulting in diversion of untreated manures to horticultural applications which traditionally have used nitrogen fertilizers. There is a shortage of suppliers servicing the leafy vegetable sector with appropriately treated manures and wastes.
7. The composting Standard AS 4454 has a significant deficiency in respect of microbiological sampling for the verification of the composting process. The standard has an appendix that sets out appropriate sampling schemes that are statistically based. However, the appendix is NOT a mandatory part of the standard. Thus, operators undertake to test one single sample for the absence of Salmonella from compost batch sizes that may be of several tonnes in size. This poses a significant risk in assessing the suitability of the composted manure.

We are of the view that the appendix should be part of the standard as has occurred in the UK. The UK standard forms part of the original basis of AS 4454. The risks assessments performed by FSANZ (Document 2) did not address the adequacy of this standard and how it is required to be implemented

Key Concerns Specific to Tripod Farmers

1. The water resource for irrigation at Tripod farms are from local river sources (major), supplied by a water authority. The farms are located in two key regions; Bacchus Marsh (Vic) and Boisdale (Vic). Within these regions there are **multiple** farm sites separated geographically. A total of **6 individual sites** are operated by Tripod. Some individual sites have adequate water dam capacity while other sites do not. Some sites have access to limited bore water supply and others do not.
2. The geographical spread of the farms and land lots results in a system consisting of multiple water sources. Thus, the microbiological monitoring of the water sources at each site alone is a significant cost. Undertaking risk assessments on the primary water sources is also a significant cost. All such costs will be incurred on an on-going basis. Not much consideration to this issue is given in Document 3.
Furthermore, the documents supplied as part of P1052 use terminology such a “frequently” or “regular” when it comes to compliance guidance for water monitoring and risk assessments. The use of ambiguous terms has a significant bad history in horticulture with guidelines in recent years suggesting annual water testing. That has been the extent of water testing on many farms for a long time.
More precise guidelines would be helpful.
3. On site water treatment options would require extensive capital and on-going operational costs. They would need to be installed at each site. Document 3 has made an allowance for a \$400 cost for water treatment. It is difficult to comprehend what the nature and extent of such a treatment could be? The document does not consider the fact that many horticultural operations will often have multiple land holdings that are geographically separated. This is not a problem unique to Tripod.
Tripod has undertaken some preliminary investigations into applying some form of chlorination. However, at present the large volumes of water and the multiple sites has rendered these approaches as prohibitive. The matter is still under investigation.
4. We are of the view that water authorities should be made fully aware of these coming changes to the water monitoring and risk assessment requirements determined by these proposed regulations. Once regular risk assessments and testing is undertaken, particularly

after bad weather events, water authorities will be inundated with enquiries concerned with poor microbiological quality. It is the proverbial can of worms.

5. We are of the view that State Governments and Water Authorities should contribute to improve the microbiological status of the catchment areas and in particular undertake some research on how quickly the microbiological water quality recovers after an adverse weather event. This would give farmers some quantitative information on typical timeframes for water recovery post adverse weather events. Farmers are unlikely to perform meaningful risk assessments of their water supplies without some Government support.

