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Subject: EBDC Fungicides and Potato PHI

Below are the responses I received from Alaska, Idaho, and Washington in response to your November 19 inquiry regarding the potential change in use for the EBDC fungicides should the PHI be decreased to 3 days. You asked:

If the PHI for the EBDCs (maneb, mancozeb, and metiram) on potatoes was changed from 14 to 3 days in your state, providing an additional use window, how would the total usage of EBDCs on potatoes change? If possible, please divide your answer among these three questions:

- 1) What percent of the current EBDC-treated potato acreage would you expect to receive an additional treatment of an EBDC fungicide during this additional use window?
- 2) What percent of the potato acreage currently untreated with an EBDC fungicide would you expect to receive treatment with an EBDC fungicide during this additional use window?
- 3) What is your rationale for your responses to questions 1 and 2?

**Alaska: Tom Jahns, University of Alaska Fairbanks**

Currently the EBDC fungicides Acrobat MZ, Polyram 80DF, and Manex are registered and available in Alaska for late blight control in potatoes.

1. Approximately 50% of Alaska's potato production occurs in the Mat-Su Valley. Here EBDC fungicides are used when late blight occurs (4 times in past 50 years). This 50% of the potato acres could easily receive an additional treatment if necessary.

2. Approximately 15% of additional potato acres could be sprayed with EBDCs if late blight becomes an issue. The rest of the potato acreage is either in organic production or lies in Interior Alaska (Delta Junction to Fairbanks) where no late blight has ever been found. No controls for early blight disease have been used in Alaska to date.

3. See above

### **Idaho: Keith Esplin, Potato Growers of Idaho**

The only scenario where the usage of EBDCs would be affected by the lower PHI would be in years of significant rainfall and cool summer temperatures. During the last 15 or 20 years, 1993 and 1997 are the only years I am aware of where the cool, wet conditions in which late blight had or could have had rapid spread occurred. In addition, one or two other years had very limited late blight outbreaks. For your question I will assume that conditions could occur in one of every three years where late blight could be an issue for Idaho growers.

The only growers that would need to use an additional application of EBDCs during the new PHI would be those growers that had, or expected to have, an outbreak of late blight, and were concerned about storing their crop. Since the time period we are referencing for this additional application occurs after vine-kill, the only purpose of the application would be to prevent the spread of late blight spores from the dying vines to the tubers. This could occur during rain events, irrigation, through cracks in the soil, or through contact with the tubers on spore infested vines during harvest. Since only a portion of the fields where an EBDC had been previously applied would fit this criteria, I would estimate that in a worse case scenario perhaps 30% of those fields would receive an additional EBDC application.

With regards to question 2, based on the rationale described above, I would estimate that 25% of fields with no previous applications of EBDCs would be treated in a worst case scenario. I really think that in the real world the total Idaho acreage that would ever be treated with an EBDC less than 14 days before harvest would probably be closer to 10%, but to be safe I see no problem using 25 to 30%.

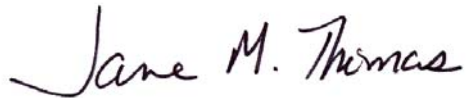
In a worse case scenario 30% of Idaho acreage may receive an application of EBDCs within 14 days of harvest 30% of the time, or an average of 10% on any single year. I think this estimate is probably two or three times what would actually occur, but it might be safer to use the higher number.

**Washington: Andy Jensen, Washington Potato Commission**

1. 80%. Post vine-kill treatments with EBDCs have been conclusively shown to reduce late blight infections in tubers. Nearly all stored potatoes would be treated post vine-kill if it were allowed.
2. 10%. About 90% of WA acreage is already treated with EBDCs. Those acres not treated with EBDCs are probably not going to storage and so post vine-kill treatments are not as warranted.

I hope that you find this information useful.

Sincerely,

A handwritten signature in black ink that reads "Jane M. Thomas". The signature is written in a cursive, flowing style.

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