

WSDA's Implementation of the Soil Fumigant Mitigation Measures

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Good Morning, I am out of the Olympia Office of the Department of Agriculture and I am one of the people who have been tasked with trying to figure out how we are going to implement the changes to the soil fumigant labels. The Department appreciates that EPA has used a public process and sought stakeholder input over the last couple years, but we are having a big problem with how they are going about implementation. These will be the most complicated and extensive label changes I've seen in the 19 years I've worked for the Department. A couple weeks ago at the Consultant's meeting I read a letter that we intended to send to EPA. We did send that letter a few days ago and I would just like to read the first paragraph. This letter was sent by WSDA Director Dan Newhouse to Steve Owens, the Assistant Administrator, Office of Pesticide Programs, in Washington DC:

Dear Mr. Owens,

The Washington State Department of Agriculture (WSDA) is requesting that EPA delay implementation of changes to the labels of the soil fumigant products... WSDA supports adopting measures to protect people and the environment; however the scheduled 2010 mitigation measures do not allow sufficient time for training of enforcement personnel or education and outreach to the pesticide user community. Based upon the magnitude of fumigation regulatory changes, the preferred outcome would be to delay implementation until the 2012 growing season. However, an alternative that would delay changes slated for...2010 until 2011 would allow state lead agencies time to prepare enforcement staff and educate end users on the specifics of the upcoming label changes. I am greatly concerned that adherence to the current timelines will be counterproductive and not allow for successful implementation of the soil fumigant mitigation measures....

The letter goes on to cite all the difficulties and uncertainties that State lead agencies are trying to deal with. EPA is not providing answers to our questions. WSDA has yet to see the final labels, and we should ALREADY have a good grasp on the new requirements. We should be training the industry now and yet we have numerous unanswered questions. I know that AAPCO, the Association of American Pesticide Control Officials, has sent a very similar letter, and if they haven't done so already, Oregon and some other states also intend to send a similar letter.

We don't know whether EPA will actually delay implementation so assuming that EPA decides to forge ahead, let's take a look at some of the things that we think are going into place this year and then how WSDA will be dealing with them.

EPA has decided to delay some of the measures until 2011. Here is a list of what they are planning to implement this year, and we will go over most of these...

Restricted-Use Designation
Site Monitoring
Handler PPE
5-Day entry prohibition
Good Ag Practices
Fumigation Management Plan
Registrant Training for Handlers

And the list of what they intend to delay until 2011, including the buffer zone requirements...

Buffer Zones
Sensitive Site Restrictions
Applicator Training
First Responder and Community Outreach
Emergency Preparedness

Restricted Use Classification - In 2010 all of the soil fumigants will become restricted use, which means that you will have to be licensed to purchase and use them. If you are on the commercial side of things you will need our current soil fumigant category on your Commercial Applicator or Commercial Operator license. If it is a non-commercial application then, at least for this year, you will just need a Private Applicator license. It is quite possible that will change in the next year or two if EPA decides to require a special examination for soil fumigations. It may be that you will have to take an exam and add a soil fumigant category to your Private Applicator license.

“Fumigant Safe Handling Information” - WSDA has no idea what this safe handling information is, and where applicators/employers are supposed to obtain it. This could be a 50 page safety manual or it could be information taken from the label and provided verbally to handlers by the certified applicator. This is an example of the kind of problems we are having with implementation – the use season will be upon us in a short time and we don’t have the specifics!

Site Monitoring - The State Chemigation rules already require monitoring every 4 hours. The new labels will require monitoring every 2 hours if you are fumigating a field that is 80 acres or larger. This does not over-ride the WSDA chemigation rules so when a sensitive area is at risk of being exposed, the application must be continuously monitored. Until the buffer zone requirements go into effect, sensitive areas must still be continuously monitored.

Worker Entry - Entry will be prohibited for all workers from the start of the application until 120 hours after the application is complete. This includes all workers, even if they

are wearing all of the PPE that handlers are required to wear. Only trained and equipped handlers may be in the treated area and only to perform handler tasks.

Handler Training - There is supposed to be handler training that will be required this year (this would be handlers who are directly supervised by a certified applicator), but again, we have no idea what this entails. We have asked EPA about this but they have not responded. As of a couple weeks ago at the Consultant's meeting, WSU was not aware of the requirements for this training. Here you have the organization that is responsible for pesticide education in this state wanting more information so they can best serve their customers. We also will continue to work with EPA to clarify our areas of concern.

Good Agricultural Practices - Some of the label statements that were previously "advisory" in nature will now become mandatory. So that you're not applying during inversion conditions, wind speed must be at least 2 mph at the start of the application, or forecast to reach 5 mph during the application. The maximum wind speed is 10 mph for mid to high release applications and 25 mph for low release height solid stream (drizzle boom) types of application.

Checking weather forecast for low-level inversions – This is a requirement that has been giving me a lot of problems. Applicators are supposed to check the weather forecast and, if a shallow, compressed (low level) inversion is forecast for more than 18 consecutive hours during the 48 hour period after the start of the application,* they cannot make the application. I've spent a considerable amount of time on the National Weather Service website and I can't even find the word "inversion" let alone a forecasted period when one is supposed to occur. This is one of the questions we posed to EPA in early November and we have yet to receive a response.

**author's note: In the presentation I indicated the 48 hour period from the start of the application through the 48 hour period after completion of the application, which is not correct.*

Soil Conditions – Soil must be in good tilth and free of large clods (whatever that means) and crop residue must lie flat, not interfere with the soil seal. Like many label requirements it is a matter of degree to be considered a violation. The conditions will be pretty drastic before we cite this as a violation. We have the "burden of proof" and we have to assume that you will take us to a hearing on this. We understand, too, that residues are left for erosion control and because of minimum tillage practices. I don't have a real good idea at this point how we will pursue this label requirement.

Temperatures – The maximum air temperature and soil temperature is 90°, and if the air temperature has been above 100° in the three days prior to the fumigation, the soil temperature must be measured and recorded in the Fumigation Management Plan. This is probably not going to affect the applications in the Columbia Basin much since most of them occur in October, but it's just another example of details that we do not yet know.

Does the application need to be shut down if the air or soil temperature reaches 90°? Or is the 90° mark only applicable at the start of the application?

Soil Moisture - Immediately prior to application the soil moisture must be 60 - 80% of field capacity in top 6 inches of soil. It must be measured by appropriate equipment or USDA *Feel Method*. Obviously we are not going to be able to tell after the fact what the soil moisture was at the start of the application so how will we know if you were in compliance? Because you will record it in the Fumigation Management Plan.

Application and Equipment Conditions - There will be a number of other requirements that will be specific to the method of application (For example, shank vs water run).

Site Specific Fumigation Management Plan (FMP) and Post Application

Summary Report – Applicators will need to fill out an FMP prior to the application and then note any changes in a post application summary report. At this point EPA has produced an FMP template for methyl bromide applications, but not yet for metam applications. There is not a required form or format so you can make your own. Creating an FMP would probably be a good place for applicators to start since the FMP really addresses most of the label changes that are coming. One of the questions that has not been answered is whether you still need to fill out a post application summary report if there were no changes to the application. The items that will be covered by the FMP include:

- Applicator Information
- Site information
- Soil Conditions
- Weather Conditions/Forecast
- Buffer Zones
- Handler PPE
- Handler Information
- Emergency Procedures
- Posting Procedures
- Site Specific Response & Mgt (Neighbors)
- Communications
- Air Monitoring (for handlers)
- GAPS
- Hazard Communications

Note that some of these items, such as buffer zones, will not be a requirement until 2011, but they will still be included on any FMP template that is developed.

Okay, how is WSDA going to implement all these changes? At least for the first couple years we intend to provide a lot of technical assistance. In most cases we will likely not even be issuing Notices of Correction, But... Applicators must still apply in a careful and safe manner. Applicators must still continuously monitor when sensitive sites are at risk, and then shut down when necessary. If houses, businesses, etc. are nearby,