Soil Fumigation Update
2013 Advisory Meeting

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Soil Fumigation – RED Labels

- **Spring Fumigation 2013 = Buffer Zones, FMPs GAPs etc.**
  - **80/20 MBr / Chloropicrin under VIF.**
  - **Pic + under VIF.**
  - **Trifecta (DMDS, Pic, Telone) under VIF.**
- **Requested from all Advisory & Contacts any issues/concerns about new rules this spring.**
  - **One reply "everything seems to be working"**
- **Fall 2013 will be the first time for many nurseries to actually use all the new rules and requirements.**

Soil Fumigation – RED Labels

- **The re-registration eligibility decision (RED) of all soil fumigants began in November 2006 and ended on December 2012.**
- **According to EPA's Registration Review schedule, all soil fumigants (Chloropicrin, MBr, etc.) need to be re-evaluated with the process starting in 2013.**
- **On September 25 2013 EPA started the process with a 60 day comment period.**
- **Released a Work Plan and Biological and Economic Analysis Division (BEAD) for each soil fumigant under review.**
- **Includes: MBr, chloropicrin, metam/potassium sodium, 1,3, dichloropropene and dazomet.**

Soil Fumigation – Registration Review

- **The Work Plan describes what is know about each fumigant, acknowledges anticipated data and the information EPA needs to conduct the review.**
- **7 year process with an end date of revised labels released in 2020.**
- **Example of information needed for MBr**
  - **New terrestrial plant toxicity**
  - **Environmental chemistry**
  - **Honey bee vapor toxicity**
  - **Inhalation exposure studies**
  - **Ambient air monitoring studies**

Soil Fumigation – Guidance for commenters

- Information on typical pre-plant, postharvest, quarantine, and non-agricultural uses of methyl bromide would improve future assessments of the importance of methyl bromide. ***Useful data would include, but not limited to, usage data such as application timing, application rate, application method, target pests, application frequency, speed of control, costs, etc. Of particular value is information regarding use and importance of methyl bromide for postharvest and QPS uses.***

- Confirmation of the following label information: sites of ***application; formulations; application methods and equipment; maximum application rates; frequency of application, application intervals, and maximum number of applications per season; and geographic limitations on use. Use distribution.***

- Typical ***application timing (date of first application and application intervals)*** – national, state, and county.
- Any state or local use restrictions

Anticipated Risk Assessments - MBr

Table 4: Anticipated Risk Assessments for the Methyl Bromide Registration Review		
Type of Risk Assessment	**Conduct?**	**Notes**
Ecological and Environmental Fate		
Comprehensive ecological (species to be assessed include terrestrial and aquatic organisms), including endangered species	Y	The ecological risk assessment will focus on methyl bromide as the main stressor of concern for air and soil exposure.
Human Health		
Dietary		
Food	Y	An updated dietary assessment may be required to incorporate any revisions to the methyl bromide drinking water assessment, or updated crop uses.
Drinking water	Y	Methyl bromide surface water exposure is not expected. However, leaching, diffusion, or movement of methyl bromide through re-charge to groundwater and resultant transport to wells nearby treated fields is possible due to its high water solubility. The relative importance of methyl bromide drinking water dosing concentrations with methyl bromide inhalation doses will be determined. As a result of this determination, drinking water assessments addressing methyl bromide soil applications will be conducted on an as needed basis.

Anticipated Risk Assessments - MBr

Occupational		
Handlers (mixers, loaders, applicators)	Y	An occupational handler risk assessment may be necessary based on the most recent toxicological and exposure (e.g., deep probe application study) data.
Post-application	Y	An occupational bystander risk assessment may be necessary based on the most recent toxicological and the anticipated exposure (e.g., post-harvest commodity worker study) data.
Residential		
Handlers	N	Methyl bromide is restricted use. There are no registered uses for applications by residential handlers.
Post-application	N	Methyl bromide is restricted use. There are no registered uses for applications facilitating typical post-application exposure.
Other		
Aggregate	Y	Evaluates the combined risk from dietary and residential exposures.
Cumulative	N	Methyl bromide is not a member of a cumulative group.
Tolerances	Y	All tolerances listed under 40 CFR §180.123 for inorganic bromides should be moved to §180.124 for methyl bromide.
Incidents	Will check for updates	For a discussion of reported human incidents for methyl bromide, see page 16 of the Scoping Document and the *Methyl Bromide: Review of Human Incidents*.

Anticipated Risk Assessments - MBr

Bystander	Y	For soil and post-harvest commodity uses, there is the potential for residential bystander (anyone not involved in the application) inhalation exposure to methyl bromide after a methyl bromide fumigation. A revised residential risk assessment is anticipated in registration review to update risk to bystanders during and following use of methyl bromide products. Additionally, the Agency anticipates updating the fumigant factors document, which provides a discussion of values and parameters used as the basis for buffer zone reduction credits as well as for establishing Good Agricultural Practices (GAPs) for the soil fumigants. Buffer zones and GAPs were specified by the 2009 amended RED as measures to mitigate occupational and bystander risk.

Public Comment & Feedback

- Of special interest to EPA
  - Trade Irritants
  - Water Quality
  - Environmental Justice
  - Endangered Species
  - Endocrine Disruptor Screening
  - Human Studies
  - Agricultural Health Studies

Timeline - MBr

Table 5: Projected Methyl Bromide Registration Review Timeline	
Activities	**Estimated Date**
Opening the Docket	
Open Docket and 60-day Public Comment Period	2013 – September
Close Public Comment	2013 – November
Case Development	
Final Work Plan	2014 – February
Issue DCI	2014 April - June
Data Submission	2017 April - June
60-day Public Comment Period for Draft Risk Assessments[12]	2018 October - December
Registration Review Decision	
60-day Public Comment Period for Proposed Registration Review Decision	2019 April - June
Registration Review Decision and Begin Post-Decision Follow-up	2020
Total (years)	7

Game Plan

- MBIP – Methyl Bromide Industry Panel
- CMTF – Chloropicrin Manufactures Task Force
  - Working group pulling all stakeholders, growers, producers that were involved with the RED together.
  - Periodic & Timely Conference Calls
  - November 25, 2013 Deadline
    - EPA is interested in setting the Work Plan
    - EPA understands the labels are less than 7 months old
    - General consensus that probably do not need to comment at this time
- SFNMC
  - Collect soil fumigant usage and soil fumigant concerns annually - 2014
  - Compile and respond to requests as they appear
  - Keep Advisory group informed