

Efforts to Reregister Soil Fumigants & the availability of MBr through CUE and QPS



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2009 Reregistration Decision – REDS: MBr, Chloropicrin, Telone, Sectagon, Dazomet

- New Rates and Formulations
 - Maximum rate of MBr would be 80%
- Buffer Zone Distances and Overlap Restrictions
- Credits for organic matter and tarp used
- Tarp Removal Restrictions
- Re-entry Interval Restrictions
- Good Agricultural Practices required
- Fumigant Management Plans required
- Emergency Responders Plan needed
- Community Outreach Programs required
- New Labels for 2010 and 2011

Fumigant Management Plans (FMP's)

- Available on EPA's website for you to download and begin the process of developing a plan for your nursery.
- First time through these documents will be time consuming and difficult.
- Search "EPA Fumigant Management Plan"
- http://www.epa.gov/opp00001/reregistration/s_oil_fumigants/fmp-template-for-2010.pdf
- http://www.epa.gov/oppsrrd1/reregistration/s_oil_fumigants/fmp-for-2011.pdf

High Use Fumigant Areas

- **EPA-Designated States with High Use Soil Fumigant Areas for Methyl Bromide, Chloropicrin and Metam Sodium are:**

- **California** **Georgia** **Florida** **Idaho**
- **Michigan** **North Carolina** **Oregon**
- **South Carolina** **Washington**

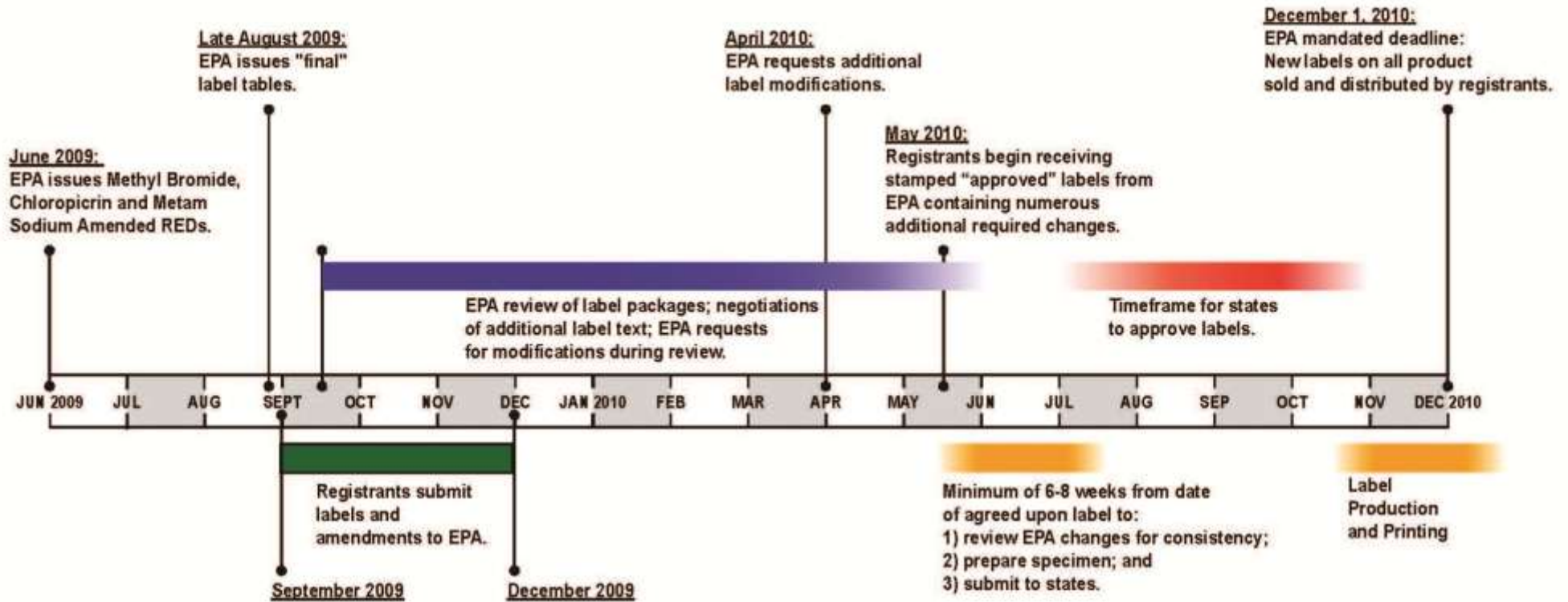
- **Additional EPA-Designated High Use Soil Fumigant States for Metam Sodium are:**

- **Arizona** **Colorado** **Minnesota** **Nevada** **North Dakota**
- **Virginia** **Wisconsin**

Risk Mitigation Measure	Currently	2011	2012
Restricted Use (methyl bromide and chloropicrin only)	∅	•	•
New Good Agricultural Practices		•	•
Rate reductions		•	•
Use site limitations		•	•
New handler protections		•	•
Tarp cutting and removal restrictions		•	•
Extended worker reentry restrictions		•	•
Training information for workers		•	•
Fumigant Management Plans		◦	•
First responder and community outreach		◦	•
Applicator training		◦	•
Compliance assistance and assurance measures		◦	•
Restrictions on applications near sensitive areas			•
Buffer zones around all occupied sites			•
Buffer credits for best practices			•
Buffer posting			•
Buffer overlap prohibitions			•
Emergency preparedness measures			•

∅ = applies to some chemicals ◦ = under development • = adopt completely

Label Approval Process Timeline



RED's – December Deadline & New Labels

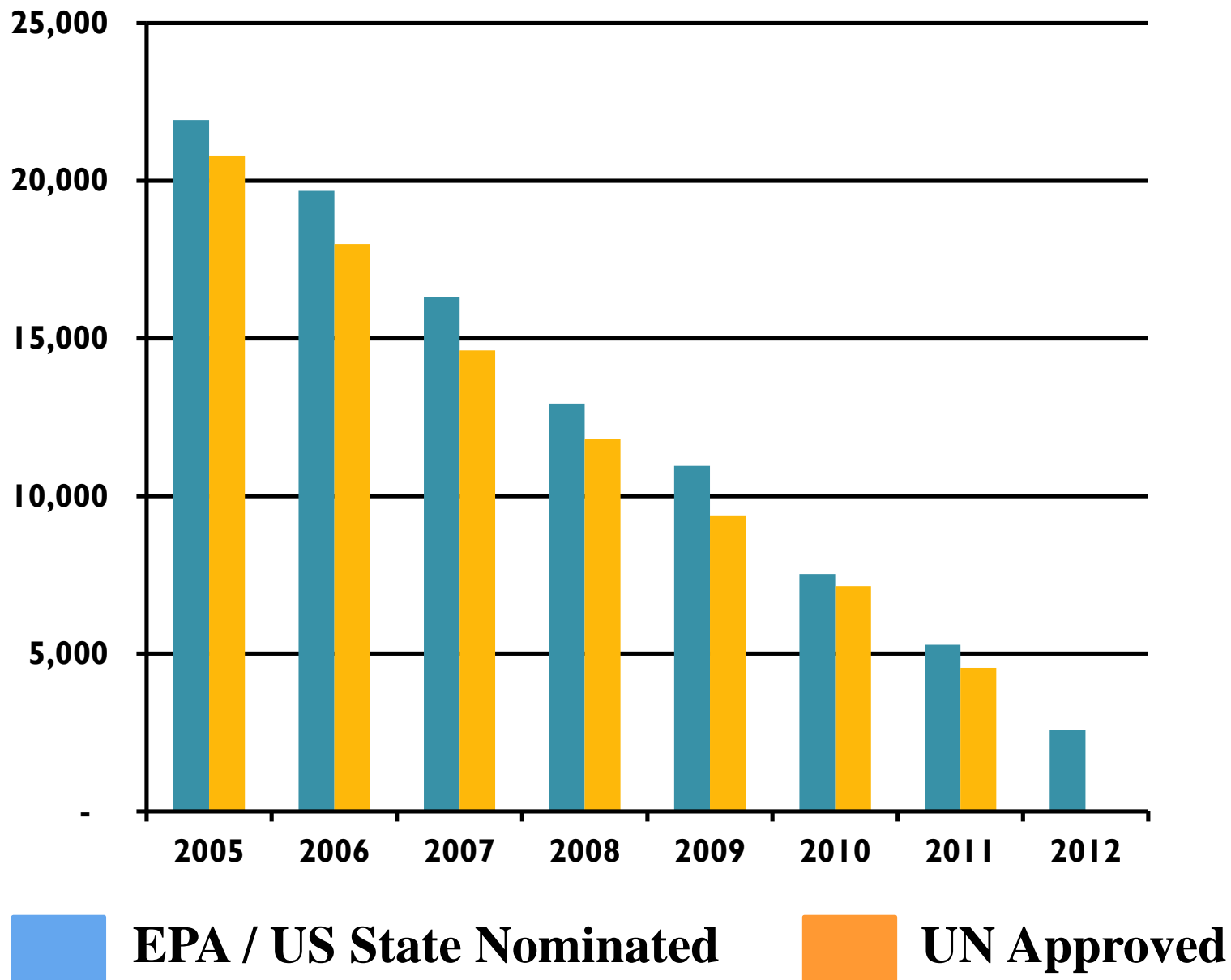
- Registrants are concerned about the feasibility of meeting the Dec 1 deadline for final label approval.
- It could be a Catch 22 scenario. Old labels cannot be used. New labels are not approved, fumigation needs to be done in Dec and early 2011.
- Registrants have sent labels to EPA in late 2009. EPA sent numerous changes back to the registrants need to look at all the suggestions. This delayed the submission to each of the states.
- Some states said their approval will take months, others said it's a rubber stamp approval. EPA was assuming that the state approval process would be quick.
- EPA is conducting monthly call for States - 3rd Wednesday of every month as a "For Your Information"
- Industry/Registrants are conducting weekly calls as well.
- We may need help contacting EPA later (Aug/Sept) if it appears that December 1st deadline can not be met. August will know for sure.
- Community outreach for the High Use States - California and Florida are trying to get the unit of notification down to an smaller unit than a county – perhaps a Township?

Methyl Bromide Supplies & Uses

- Critical use exemption – CUE
 - Nursery Cooperative has filed on behalf of all southern nurseries since 2003.
- Quarantine pre-shipment – QPS
 - Through EPA & USDA-APHIS rulings, Forest-Tree Nurseries are allowed to use MBr through Montreal Protocol Exemption (so far).

U.S. CUE End-User Applications

1000's of Pounds MBr



CUE - Reminder

- Not intended for a “permanent” solution for continued MBr use.
- No “cut-off” date for stopping CUE applications.
- Chlorofluorocarbons still in some use 13+ years after phase-out.
- Montreal Protocol & the Clean Air Act were intended to stop the use of methyl bromide.

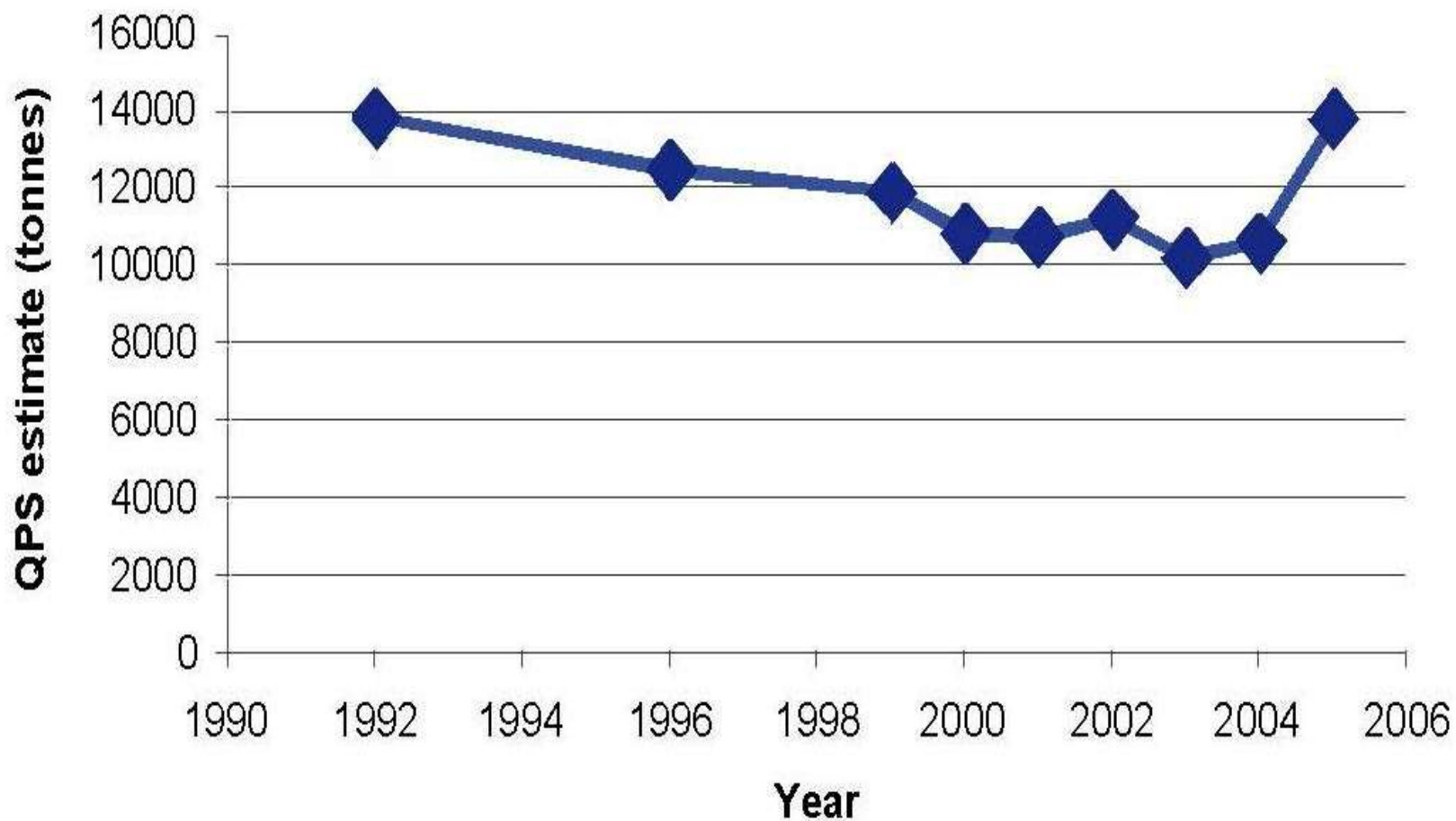
Critical Use Exemption

- Nursery Cooperative was asked again about iodomethane use in 2009 and 2010.
- Decent seedling production, good soil-borne fungi control, moderate *Trichoderma spp*, so-so weed control.
- Currently has the strongest label restrictions of any soil-fumigant: Buffers, Area Restrictions, Rate Restrictions, etc. (similar to MBr, etc when RED's finalized).
- Difficult to get material applied in states other than Florida, Georgia or Alabama.

QPS: Preplant use of MBr for Intra- and Inter-state movement of seedlings.

- Significant push by European Union to significantly reduce QPS use worldwide.
- Claims U.S. is playing games with EU & strong feelings that pre-plant uses lack efficacy data to adequately get control based on EU standards.
- EU claims that state boundaries do not count – QPS in the Montreal Protocol was for International Boundaries and that rules put into place in the US after 1993 do not count based on international rules.

Estimate of Worldwide QPS Use

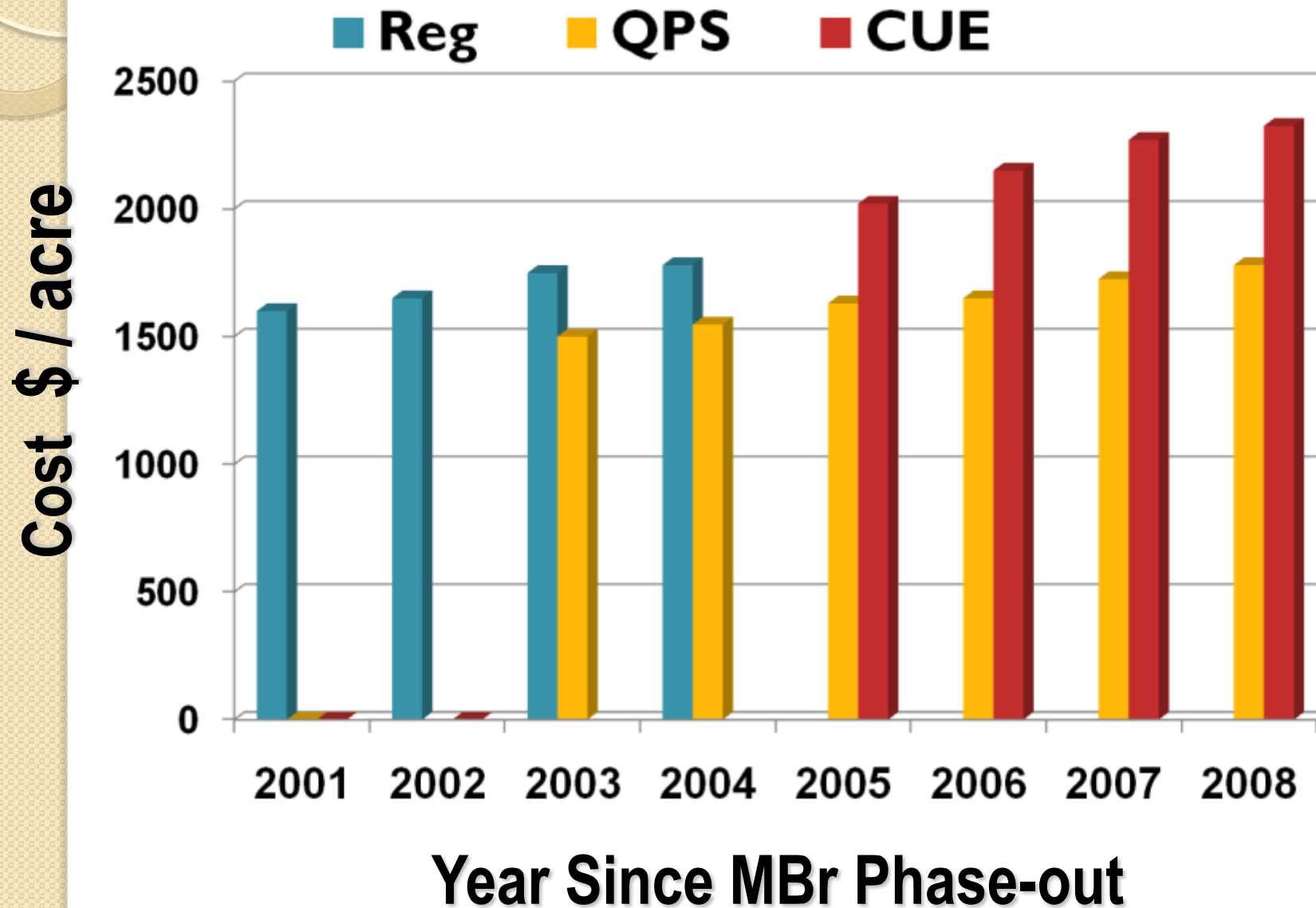


Data from UNEP and MeBTOC: Methyl Bromide :Quarantine and Pre-shipment Uses.

QPS: Preplant use of MBr for Intra- and Inter-state movement of seedlings.

- Earlier this spring, I was asked to clarify CUE application and QPS use to USDA, APHIS, EPA and the State Department.
- Forwarded copies of 11+ state plant pest requirements to Washington, DC for their use in negotiating with European Union and the Methyl Bromide Technical Options Committee.
- No word what came of the State's plant pest requirements. The CUE awarded for 2012 will be announced in October 2010. Generally, at the CUE meeting, QPS use comes up.

Cost & Source of MBr



Soil Fumigants – In Summary

- The availability and use of MBr for the production of forest tree seedlings is limited to those who have access to either the CUE or fall under the QPS Rules.
- Both CUE & QPS are limited and under scrutiny by a number of US governmental and International organizations.
- A number of soil fumigants have been examined as alternatives to MBr, none as drop-in replacements, each with its own unique properties and challenges that will need to be tweaked by individual nursery managers under their own production systems.
- The new REDs will require a concerted effort by producers, applicators and users to ensure the safety of bystanders and document each application of soil fumigant.
- While the costs to fumigate will probably increase, at least the rules allow the continued use of soil fumigants in the unique production systems that are forest tree nurseries.