McDermott Will & Emery

2009 MRL Workshop

Methyl Bromide / Montreal Protocol Quarantine and Pre-Shipment Exemption and Production Issues

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Montreal Protocol and the Clean Air Act

Methyl Bromide / Montreal Protocol

Quarantine and Pre-shipment

Exemption and Production Issues

- Overview
- Methyl Bromide Under The Montreal Protocol And The Clean Air Act
- Methyl Bromide Under The Federal Insecticide, Fungicide And Rodenticide Act
- Concluding Remarks

Montreal Protocol and the Clean Air Act (Cont'd)

The Montreal Protocol – What is it?

- The United States was an original signatory to the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer.

Montreal Protocol and The Clean Air Act (Cont'd)

- In 1980, then President George Bush signed into law, amendments to the Clean Air Act which essentially incorporated the provisions of the Montreal Protocol into Title VI of the Clean Air Act (CAA). [42 U.S.C. 7671 *et seq*.]

- In 1992, MB was added to the Montreal Protocol. It was assigned an ozone depleting potential (ODP) of 0.7

- On December 10, 1993, EPA published a rule classifying MB as a Class I ozone depleting substance, and froze its U.S. production and consumption at 25,528,270 kilograms. This is referred to as its 1991 baseline production level.

Montreal Protocol and The Clean Air Act (Cont'd)

- A schedule regulating production of the chemical was established which, if followed, would result in the complete phase out of the chemical by January 1, 2001.
- In 1995, the Parties to the Montreal Protocol adjusted the provisions of the Protocol regulating the phase-out of MB worldwide.
- In 1998, amended the CAA to prohibit the termination of the production of MB by EPA until January 1, 2005.

Montreal Protocol and The Clean Air Act (Cont'd)

Critical Use Exemption ("CUE")

- A critical use is one which meets two criteria.
  - First, the use is critical because the lack of the availability for that use would cause a significant market disruption.
  - Second, there are no technically and economically feasible alternatives available that are environmentally acceptable.

Montreal Protocol and The Clean Air Act (Cont'd)

- Overall process
  - It is important to remember that the CUE process applies to MB produced after January 1, 2005 (new production). Material produced before that date is referred to as "Existing Stocks".
- Applications are done yearly and are made to the U.S.E.P.A.
- Once received, the U.S.E.P.A. together with assistance from the U.S.D.A., reviews and evaluates the submitted application including its supporting information.

Montreal Protocol and The Clean Air Act (Cont'd)

- After the review, EPA develops a position on the appropriate CUE amounts to be recommended by the U.S. to the other Parties to the Montreal Protocol.

- The annual nominated amounts for each country are reviewed by committees established under the Protocol, namely the Technology and Economic Assessment Panel ("TEAP") and its MB Technical Options Committee ("MBTOC").

Montreal Protocol and The Clean Air Act (Cont'd)

- The Parties then make a final decision on the nominated amounts.
- In the U.S., to authorize any new production for CUE use, EPA has to initiate a rulemaking process.

Montreal Protocol and The Clean Air Act (Cont'd)

2009 CUE

Total Protocol CUE	4,261,974 Kg
Total EPA CUE	4,194,908 Kg
Difference	67,066 Kg
Total Protocol New Production	3,961,974 Kg
Total EPA New Production	2,275,715 Kg
Difference	1,686,259 Kg

Montreal Protocol and The Clean Air Act (Cont'd)

Percentage of 1991 Baseline

Protocol CUE Authorized	16.7%
EPA Cue Authorized	16.4%
Difference	.2%
Protocol New Production	15.5%
EPA New Production	8.9%
Difference	6.6%

Montreal Protocol and The Clean Air Act (Cont'd)

The Quarantine and Pre-Shipment ("QPS") Exemption

- Article 2H(6) of the Protocol provides that "6. The calculated levels of consumption and production under this Article shall not include the amounts used by the Party for quarantine and pre-shipment applications."

Montreal Protocol and The Clean Air Act (Cont'd)

- A "quarantine" application of MB is a treatment "to prevent the introduction, establishment and/or spread of quarantine pests (including diseases) or to ensure their official control, where: (1) official control is that performed by, or authorized by, a national (including state, tribal or local) plant, animal or environmental protection or health authority; quarantine pests are pests of potential importance to the areas endangered thereby and not yet present there, or present but not widely distributed and being officially controlled."

Montreal Protocol and The Clean Air Act (Cont'd)

- A "pre-shipment" application is a non-quarantine treatment:

  "applied within 21 days prior to export to meet the official requirements of the importing country or existing official requirements of the exporting country. Official requirements are those which are performed by, or authorized by a national plant, animal, environmental, health or stored product authority."

Montreal Protocol and The Clean Air Act (Cont'd)

- Under Article 7 of the Protocol, the Parties are supposed to report on the annual amount of MB used for QPS.
- The requirement that pre-shipment applications occur within 21 days of the shipment is certainly arbitrary.
- A difference exists between treatment to meet the official control requirements under the quarantine part of the exemption, versus meeting official requirements under the pre-shipment provisions of the exemption.
- The pre-shipment exemption does not apply to the treatment with MB to meet private contractual or commercial requirements.

Montreal Protocol and The Clean Air Act (Cont'd)

- Regarding the Quarantine exemption, as long as MB is identified as a treatment option, even if there are other treatment options available, its use for such purpose would qualify under the exemption.

- Treatment of a facility such as a mill or warehouse to prevent pest infestation would not be covered under the QPS exemption.

- The quarantine exemption does apply to the use of MB on soil used to grow propagative material, such as seeds, to meet the requirements of the destination to which the propagative material will be shipped.

Montreal Protocol and The Clean Air Act (Cont'd)

- EPA has established recordkeeping requirements for producers and importers of methyl bromide intended to be used solely for quarantine/pre-shipment purposes.

- At the same time, applicators of methyl bromide for QPS purposes at the time of purchase, are required to file a certification with the distributor of methyl bromide specifying the amount of material being used solely for such purposes. Such certification must be made before shipment of the material to the application.

- For quarantine purposes, the applicator/purchaser has to identify the official requirement justifying the treatment.

Montreal Protocol and The Clean Air Act (Cont'd)

Current Status of the QPS Exemption Under the Protocol

- The Parties to the Protocol are concerned that QPS exemption is creating a substantial loophole from the phase out provisions.

- A review of the QPS exemption process is being undertaken by the Technology and Economic Assessment Panel under the Protocol ("TEAP").

Montreal Protocol and The Clean Air Act (Cont'd)

- Main (>85%) uses of MB for QPS involve:
  - Fresh fruit and vegetables
  - Grain, including rice
  - Soil in situ
  - Whole logs
  - Wood and wooden packaging material
- A review is being conducted to identify potential barriers to the adoption of alternatives to MB for QPS.

Methyl Bromide Under the Federal Insecticide, Fungicide and Rodenticide Act

Re-Registration Process

- These include:
  - Elimination of certain uses
  - Restriction on certain formulations (98/10)
  - Establishment of buffer zones
- Implementation of "credits."
- Establish conditions under which permission must be sought if buffer zones extend into a public sidewalk.

Methyl Bromide Under the Federal Insecticide, Fungicide and Rodenticide Act (Cont'd)

- Establish monitoring of residues in air around structures in the treated buffer zone.
- Create restrictions for use at certain times around "difficult to evaluate sites."
- Require posting at entry points to a treatment site.
- Establish additional personal protective equipment requirements for applicators.

Methyl Bromide Under the Federal Insecticide, Fungicide and Rodenticide Act (Cont'd)

- Establish requirements for perforating and removing tarps.
- Establish re-entry restrictions.
- Assure existence of good agricultural practices and their implementation.
- Establish fumigant management plans before fumigation begins, including certain recordkeeping requirements for each application.

Methyl Bromide Under the Federal Insecticide, Fungicide and Rodenticide Act (Cont'd)

- The creation of an emergency response and preparedness program.
- Establish a community outreach and education program.

Methyl Bromide Under the Federal Insecticide, Fungicide and Rodenticide Act (Cont'd)

Timeline

- Summer 2009 – EPA sends letters to registrants outlining label schedule.
- Fall 2009 – Registrants submit revised labels to EPA.
- 2010 – EPA reviews and approves label changes prior to growing season to implement most of the changes, excluding those associated with buffer zones.
- 2011 – EPA implements restrictions involving buffer zones.
- 2013 – EPA begins re-evaluation of all fumigants under its Registration Review Program.

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Concluding Remarks