

**AGREEMENT IN PRINCIPLE TO IMPLEMENT THE ORGANIC ARSENICALS
REREGISTRATION ELIGIBILITY DECISION (RED)**

1. Parties. This Agreement is between the members of the MAA Research Task Force (Task Force), who are registrants of pesticide products containing monosodium methanearsonate (MSMA), disodium methanearsonate (DSMA), calcium acid methanearsonate (CAMA), and cacodylic acid and its sodium salt (hereinafter referred to as registrants), and the Office of Pesticide Programs (OPP) of the U.S. Environmental Protection Agency (EPA).

2. Reregistration of MSMA for Use on Cotton. EPA will amend the "Revised Reregistration Eligibility Decision for MSMA, DSMA, CAMA, and Cacodylic Acid" dated August 10, 2006 (RED) to state that a registration allowing the use of MSMA on cotton is eligible for reregistration if: a) the registrant of an MSMA product labeled for use on cotton submits an application by March 17, 2009, to i) amend each affected MSMA product to adopt the mitigation measures described in Attachment A to this Agreement; and ii) to adopt as a term and condition of registration that the registrant will either cite or submit the data described in Attachment B by the dates specified in Attachment B; and b) the registrant submits or cites confirmatory data as described in Attachment B to this Agreement that demonstrates that no detectable residues of inorganic arsenic will be found in meat or milk of cows consuming cottonseed and cotton gin trash or in rotational crops as a result of use of MSMA on cotton.

3. Scientific Peer Review for Cancer Mode of Action. OPP agrees that it will strive to take the issue of the mode of action for carcinogenic effects by inorganic arsenic to a joint review by the EPA Science Advisory Board (SAB) and the FIFRA Science Advisory Panel (SAP) in the first half of 2012. If other EPA program offices do not concur with OPP that the issue of the mode of action for carcinogenic effects by inorganic arsenic warrants SAB involvement, OPP agrees that it will convene an SAP review of this issue in the first half of 2012. EPA agrees that in determining whether to present the mode of action issue to the SAB, the Agency will consider any relevant scientific data or information submitted by the Task Force or its members, or any other person, addressing the issue of whether the state of the science has advanced sufficiently to justify an SAB role in this peer review process, provided that data or information is submitted to EPA sufficiently in advance of the peer review to be scheduled in the first half of 2012.

4. Voluntary Cancellations of DSMA, Cacodylic Acid and its sodium salt, and CAMA. By March 17, 2009, each registrant of a product that contains DSMA, cacodylic acid or its sodium salt, or CAMA as an active ingredient must submit an application pursuant to Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 6(f) to cancel the registration of such products effective on December 31, 2009 or, at the registrant's discretion, an earlier date. Affected registrants may, if they choose, request a waiver of the 180-day comment period under Section 6(f). EPA reserves the right pursuant to Section 6(f)(1)(C) to provide a shorter comment period under Section 6(f) if registrants do not request such a waiver. EPA agrees that registrants may condition the cancellation request on the Agency allowing: a) sale or distribution of existing stocks of any cancelled DSMA, cacodylic acid or its sodium salt, or CAMA product until December 31, 2009, b) other persons to continue to sell or distribute such existing stocks until

June 30, 2010, and c) users to continue to use such products until December 31, 2010. As used in this Agreement, the term "existing stocks" are products that have been released for shipment prior to the effective date of cancellation. "Released for shipment" shall mean that the producer has packaged and labeled the product in the manner in which it will be shipped, or has stored it in an area where finished products are ordinarily held for shipment.

5. Deletion of Certain MSMA Uses. By March 17, 2009, each registrant of a product that contains MSMA as an active ingredient must submit an application pursuant to FIFRA Section 6(f) to delete residential, bluegrass grown for seed, ryegrass grown for seed, fescue grown for seed, forestry, non-bearing fruit and nuts, citrus (bearing and non-bearing), all uses of MSMA in Florida (other than cotton grown in those counties in Florida specified in Group 3 in Attachment A), and non-crop use sites, including drainage ditch banks, railroad, pipeline and utility rights of way, fence rows, storage yards, and similar non-crop areas from the approved labeling for that product effective on December 31, 2009, or at the registrant's discretion, an earlier date. Affected registrants may, if they choose, request a waiver of the 180-day comment period under Section 6(f). EPA reserves the right pursuant to Section 6(f)(1)(C) to provide a shorter comment period under Section 6(f) if registrants do not request such a waiver. EPA agrees that registrants may condition their request to delete uses on the Agency allowing: a) sale or distribution of existing stocks of any MSMA product labeled for deleted uses until December 31, 2009, b) other persons to continue to sell or distribute such existing stocks until June 30, 2010, and c) users to continue to use such products on the deleted use sites until December 31, 2010.

6. Revised Labeling and Future Use Deletions. By March 17, 2009, the registrant of each MSMA product currently labeled for use on golf courses, sod farms, and/or highway rights of way must submit an application for amended registration to revise the approved labeling for that product to incorporate all applicable mitigation measures described in Attachment A to this Agreement, and to delete any language on the current approved labeling for that product that is inconsistent with the revised labeling set forth in Attachment A or otherwise inconsistent with the provisions of this Agreement. Each registrant shall also submit with the amendment application a signed statement certifying that the amended labeling includes no changes to existing labeling other than those required to comply with the terms of this Agreement and, if applicable, additional provision(s) agreed upon by EPA in writing prior to the submission of the application. As part of the same submission, the registrant of each MSMA product currently labeled for use on golf courses, sod farms, and/or highway rights of way shall submit an application pursuant to FIFRA Section 6(f) to delete all such uses from the approved labeling for that product effective on December 31, 2012, or at the registrant's discretion, an earlier date. Affected registrants may, if they choose, request a waiver of the 180-day comment period under Section 6(f). EPA reserves the right pursuant to Section 6(f)(1)(C) to provide a shorter comment period under Section 6(f) if registrants do not request such a waiver. EPA agrees that registrants may condition their request to delete uses on the Agency allowing: a) sale or distribution of existing stocks of any MSMA product labeled for deleted uses until December 31, 2012, b) other persons to continue to sell or distribute such existing stocks until June 30, 2013, and c) users to continue to use such products on the deleted use sites until December 31, 2013. If any person submits benefits information concerning these uses to EPA on or before December 31, 2011, EPA agrees that it will review such information and will, if the Agency finds it appropriate,

amend its position on continued registration of these uses. The Agency will consider any written recommendations of the peer review body and make a written determination whether EPA believes that the science on the mode of action issue has changed sufficiently to warrant a continuation of the golf course, sod farms, or highway rights of way uses of MSMA. EPA further agrees that, if it does not provide the Task Force with this written determination by December 31, 2012, the effective date for the deletion of these uses from approved labeling of registered MSMA products will be extended until the required written determination has been provided to the Task Force, and the deadlines for sale, distribution, and use of existing stocks labeled for these uses will be extended by an equivalent period.

7. *New Applications for Registration of Deleted Uses.* The registrants retain the right to submit an application under FIFRA for a new registration, or an amendment of an existing registration, for any currently registered use of MSMA that is deleted pursuant to the provisions of this Agreement. Such an application may be submitted prior to the effective date of any agreed use deletion, and EPA agrees that it will act on any such application within the time specified by PRIA. To the extent that it is available to be considered sufficiently in advance of any applicable PRIA deadline, EPA agrees that it will consider the results of the scientific peer review described in Paragraph 3 in making determinations concerning any such application. EPA also agrees that the applicant will retain the right to a formal adjudicatory hearing under FIFRA Section 3(c)(6) if EPA elects to deny any such application, but the parties agree that Section 558(c) of the Administrative Procedure Act will not apply to such an application.

8. *Additional Label Language for Technical Registrations.* Registrants of any technical registration of MSMA must submit an application for amended registration by March 17, 2009, that includes the following language in the use directions on the product label: "This product may not be used to formulate a pesticide product unless such pesticide product has either received its initial registration from EPA after January 16, 2009, or EPA has approved an amendment to such registration after January 16, 2009."

9. *Arsenic Registrations Not Part of this Agreement.* EPA intends to take appropriate regulatory action to assure that current registrations of pesticide products containing monosodium methanearsonate (MSMA), disodium methanearsonate (DSMA), calcium acid methanearsonate (CAMA), and cacodylic acid and its sodium salt that are not part of this agreement conform either to the terms of this Agreement or to the regulatory position embodied in the August 2006 RED unless EPA determines that other terms and conditions are appropriate. If EPA determines that other terms and conditions are appropriate, or if EPA grants new applications for registration inconsistent with the terms of this Agreement, signatories to this Agreement may request conforming registrations or amendments with similar terms and conditions. EPA shall promptly grant such conforming registrations or amendments pursuant to FIFRA section 3(c)(7)(A) except as provided below. EPA will not approve conforming registrations or amendments if it determines that it erroneously granted a registration or amendment with terms and conditions that differ materially from those permitted under the Agreement. In such a case, EPA will promptly initiate action to revoke such registration or amendment and will not approve conforming registrations or amendments based on the erroneously granted registration or amendment. EPA will also not approve conforming

registrations or amendments if such conforming registrations or amendments do not comply with section 3(c)(1)(F) of FIFRA.

10. Entire Agreement. This Agreement and the Attachments thereto constitute the entire agreement between the Task Force, its member companies, and EPA. There are no agreements, representations, or inducements made or exchanged between the parties beyond those set forth in this Agreement. The terms of this Agreement may only be amended by mutual consent of the parties in writing.

Date: 1.16.09

Bernard P. Bergern, Jr.

OPP/EPA

Gulberg, Counsel to MAA Remedial Tech Inc, which includes Kumb-Fremont

KMG-Bernuth, Inc.

Gulberg, Counsel to MAA Remedial Tech Inc, which includes Luxemb. Pamol, Inc.

Luxembourg-Pamol, Inc.

Gulberg, Counsel to MAA Remedial Tech Inc, which includes Drexel Chem Co.

Drexel Chemical Company

Attachment A

Mitigation Required for Organic Arsenicals

Group 1 – eligible for reregistration: MSMA use on Cotton

Postemergent use on cotton with 1 application at 2 lbs ai/A.

A second application at 2 lbs ai/A may be applied as salvage operation (i.e., if pigweed escapes the first application).

50 foot buffer around permanent water bodies.

Pre-plant cotton use to be deleted

Group 2 – MSMA Use on golf courses, sod farms and highway rights-of-way: Products must be labeled to prohibit use after December 31, 2013

Golf courses:

Spot treatments only (100 square feet per spot), not to exceed 25% of total golf course acreage per year.

One broadcast application for newly constructed golf courses.

Sod farms:

1 - 2 broadcast applications.

25 foot buffer around permanent water bodies.

Highway rights-of-way (ROW):

Two broadcast applications for use only on highway rights of way.

100 foot buffer around permanent water bodies.

Group 3 – All other uses: Must be deleted from labels effective December 31, 2009. In some cases this may be all the uses on some products:

All currently registered uses of DSMA, CAMA, DMA (cacodylic acid and its sodium salt).

MSMA product registrations must be amended to delete the following uses:

Residential turf

Forestry

Non-bearing fruit and nuts

Citrus, bearing and non-bearing

Bluegrass, fescue and ryegrass grown for seed

All uses of MSMA in Florida except use on cotton grown in Calhoun, Columbia, Escambia, Hamilton, Holmes, Jackson, Jefferson, Okaloosa, Santa Rosa, Suwannee, Walton, and Washington counties.

Drainage ditch banks, railroad, pipeline, and utility rights of way, fence rows, storage yards and similar non-crop areas.

Attachment B
Data Required for Cotton Use of MSMA

I. Residue Data in Cows

Registrants must develop confirmatory data that demonstrate no detectable residues of inorganic arsenic will be found in the edible tissues and milk of cows consuming cotton feed items treated with MSMA.

Data may be developed in a tiered fashion.

Tier 1 will test residues of inorganic arsenic in cows from herds in Minnesota, known to consume water with high levels of inorganic arsenic, previously studied by Murphy, et al, 2008. Samples will include animals from herds with high, medium and low exposure. High exposure to inorganic arsenic in water in MN is expected to be in the 50-70 ppb range. The detection limit goal for inorganic arsenic is 2 ppb.

The Task Force agrees to finalize the Tier 1 protocol by COB January 29th, if EPA provides comments on the current DRAFT dated December, 2008, by COB January 22, 2009. Task Force will submit results of Tier 1 study by July 30, 2009.

Tier 2 will be conducted only if inorganic arsenic is found in tissues from any of the MN cows.

The Tier 2 study will follow EPA guidelines for an animal feeding study (860.1480). EPA will consider modifications to the guideline as appropriate during the protocol development process. Test substance will be inorganic arsenic. Doses will be determined according to EPA guidelines and available scientific data.

The Task Force agrees to submit a framework for the Tier 2 study by April 1, 2009.

EPA agrees to review the framework expeditiously, and all parties agree to finalize the protocol by August 31, 2009. Task Force agrees to submit results of the Tier 2 feeding study by August 30, 2010.

II. Rotational Crop Data

Registrants must provide data demonstrating no residues of inorganic arsenic in food crops (peanuts) that are rotated with cotton. This requirement may be satisfied with data from the open literature, or a new study conducted in accordance with guideline 860.1900. These data are due no later than August 30, 2010.