

US EPA ARCHIVE DOCUMENT



Memorandum of Agreement Amending Aluminum and Magnesium Phosphide RED

Concluding two years of extensive discussions with USDA and interested stakeholders, EPA and the registrants of pesticide fumigant products containing aluminum and magnesium phosphide, or phosphine, signed a Memorandum of Agreement in November 2000, to reduce risks to workers handling these pesticides and bystanders in the vicinity of applications. Under the agreement, over the next several years, registrants will develop additional data and information to better characterize risks to workers and bystanders. EPA will use these new data in the future to update the current risk mitigation measures, as necessary.

The Memorandum of Agreement addresses many of the risk concerns that EPA identified in its December 1998 Reregistration Eligibility Decision (RED) for Aluminum and Magnesium Phosphide. These chemicals release highly toxic phosphine gas when they react with moisture in the atmosphere. Aluminum and magnesium phosphide are used widely to control insects and rodents in facilities where raw agricultural commodities and processed foods are stored. Few viable pesticide alternatives are available for these vital agricultural uses.

Provisions of the Agreement

The Memorandum of Agreement regarding phosphine-based fumigants contains the following major provisions:

- **Fumigation Management Plans...** In about a year, phosphine users will be required to develop site-specific fumigation management plans prior to each application. The plan must evaluate the suitability of the site for fumigation and include safety measures, emergency procedures, and monitoring and notification provisions, as appropriate. With input from EPA, registrants will develop guidance for users on how to prepare fumigation management plans. This guidance will be included in an Applicator's Manual that will become part of phosphine product labeling.
- **Incident Reporting...** Each registrant will conduct a two-year incident reporting project. A company-designated FIFRA section 6(a)(2) compliance officer will establish a company-wide system for collecting incident reports. Each registrant will provide a summary report to EPA on April 1, 2001, and April 1, 2002, analyzing incidents during the previous calendar year and noting any trends. After the second report, EPA and the registrants will decide whether this incident reporting should continue in future years.
- **Monitoring Studies...** Registrants will develop protocols and feasibility studies for fumigant exposure monitoring studies. These studies, which will measure exposures to fumigators, aerators, and bystanders, will determine the rate of decay/dissipation of phosphine at varying distances from fumigated

structures or other sites. EPA will develop an Information Collection Request for OMB approval and will issue a Data Call-In notice to obtain these studies.

- ***Worker Exposure Limits...*** EPA is reviewing the registrants' recently submitted science-based literature assessment to determine whether the current worker exposure standards for phosphine should be lowered. If the Agency decides that the current 0.3 ppm exposure limit is not adequate, EPA may require further data through another Data Call-In notice.
- ***Training and Certification...*** The registrants will work with EPA, USDA, academia, the States, and the user community in developing training modules and examination questions that can be used by the States in their applicator Certification and Training programs. The guidance prepared by registrants to assist users in developing fumigation management plans will be incorporated into the States' C&T training modules.
- ***Other Label Modifications...*** Phosphine product labeling must be amended to reflect the following use requirements.
 - # Prohibit in-transit aeration;
 - # More strictly define "under the supervision of a certified applicator";
 - # Enhance notification of receivers of fumigated rail cars and other containers;
 - # Impose a two-person rule for fumigations requiring entry into a structure; and
 - # Provide safety material to residents having burrows treated.

Stakeholder Involvement

In the 1998 RED document, EPA proposed a set of risk mitigation measures for aluminum and magnesium phosphide, and requested stakeholder input and ideas regarding possible alternative ways to achieve risk reduction while maintaining the benefits of continued use of these pesticides. The Agency received over 570 comments during a 90-day public comment period. Most objected to the 500-foot buffer zone, notification of local residents, and lowering the worker exposure standard from 0.3 ppm to 0.03 ppm, three of the 15 mitigation measures proposed in the RED.

In considering these and other public comments received, EPA consulted with USDA and the Phosphine Task Force, which was commissioned by USDA to discuss fumigant uses and risks and explore other measures to mitigate those risks. The Agency consulted with States and Tribes through SFIREG, the State FIFRA Issues Research and Evaluation Group, and through conference calls with interested States. EPA and USDA also worked with the Phosphine Coalition, a broad-based group consisting of over 80 registrants, fumigation companies, trade organizations, and users who came together to address issues related to reregistration of phosphine fumigants. By arranging fumigation field demonstrations and other opportunities for productive interaction with the user community, the Phosphine Coalition has assisted EPA in better understanding real world phosphine uses and risks, and in more realistically assessing the practicality of various risk management alternatives.

Next Steps

In a Federal Register Notice published on February 2, 2001, EPA announced the availability of the Memorandum of Agreement, which amends the Aluminum and Magnesium Phosphide RED. Public comment is invited for 30 days. The Agency will consider comments received along with new data and information developed through the Memorandum of Agreement in further characterizing the risks of aluminum and magnesium phosphide, and in determining whether to modify or supplement the risk mitigation measures provided through the Agreement.

To Obtain and Comment on the Agreement

The Aluminum and Magnesium Phosphide RED and the Memorandum of Agreement amending the RED are available on EPA's web site at <http://www.epa.gov/REDS>. Printed copies are available from the Pesticide Docket, Public Information and Records Integrity Branch, Information Resources and Services Division (7506C), Office of Pesticide Programs, Environmental Protection Agency, Ariel Rios Building, Washington, D.C. 20460, telephone 703-305-5805.

The Federal Register Notice announcing the availability of the Memorandum of Agreement for public comment is available from EPA's web site at www.epa.gov/fedrgstr. Please send written comments to the Pesticide Docket at the address above. Comments also may be submitted electronically to opp-docket@epamail.epa.gov. No Confidential Business Information (CBI) should be submitted through email.

For More Information

For information on the Aluminum and Magnesium Phosphide RED and the Memorandum of Agreement, please contact Mark Hartman, Team Leader, Special Review and Reregistration Division (7508C), Office of Pesticide Programs, US EPA, Ariel Rios Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460-0001; telephone 703-308-0734; email hartman.mark@epa.gov.

For general information about EPA's pesticide regulatory programs, please contact: Communications Services Branch Office of Pesticide Programs (7506C) US Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, DC 20460-0001 Telephone: 703-305-5017