



Mary-Ann Warmerdam
Director

Arnold Schwarzenegger
Governor

May 29, 2008

WHS 08-02

TO: County Agricultural Commissioners

SUBJECT: PROPOSED AMENDMENT TO TITLE 3 CCR SECTION 6400 TO INCLUDE
“PHOSPHINE GAS” AND “MAGNESIUM PHOSPHIDE” IN THE RESTRICTED
MATERIALS LIST

The Department of Pesticide Regulation is proposing a regulatory change to Title 3 California Code of Regulations Section 6400. This change would add “Phosphine Gas” and “Magnesium Phosphide” to the list of restricted materials. Even though this is an addition to the list, it is not truly an additional restricted material. Aluminum Phosphide (Phostoxin) is already on the list. Aluminum phosphide itself is not the true pesticide, but the precursor to the actual pesticide agent, phosphine gas. It is the gas, not the solid, which kills the pests.

In the past eight years, registrants have developed formulations and delivery systems for phosphine gas. It is now possible for applicators to bypass the use of precursors and use the killing agent directly. However, even though the killing agent for aluminum phosphide is phosphine gas, only the precursor solid was listed in the restricted materials list. All metal phosphides and phosphine gas are federally classified as restricted materials. With the expanding use of the gas, this omission needs to be corrected, thus the addition of “phosphine gas” to the list of restricted materials. Since phosphine gas is the ultimate physical state from aluminum phosphide hydration, it would be a serious mistake not to include it in the restricted material list, just because there was no use of precursor material. Likewise, the addition of magnesium phosphide to the list corrects the exclusion of a different precursor material that also, with hydration, evolves into phosphine gas. Designating these chemicals as restricted materials will provide an effective mechanism to implement appropriate mitigation measures including specific training and certification requirements, and allow Commissioner’s staff on-site evaluation to ensure worker safety, thereby preventing possible exposures.

The addition of “phosphine gas” to the list will capture into the system users who are working with phosphine gas that was not developed from aluminum phosphide but released from a cylinder. It will also capture phosphine users whose precursor material was magnesium-based, as opposed to aluminum-based.

An overview of the use of phosphine gas and phosphine-generating materials was written by Worker Health and Safety Branch (WHS) staff and is available at <http://www.cdpr.ca.gov/docs/whs/pdf/hs1863.pdf>. This document discusses the uses of phosphine, illness data, worksite inspections, formulations and regulatory requirements. This document should provide further information as to why DPR is proposing this regulatory change.



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If you have any comments on this proposed regulatory change, please contact Mr. Harvard Fong of WHS by telephone at (916) 445-4211, or by e-mail at hfong@cdpr.ca.gov.

Sincerely,

[Original signed by G. Farnsworth]

George Farnsworth, Environmental Program Manager I
Worker Health and Safety Branch
(916) 445-4222

cc: Mr. James E. Shattuck, Agricultural Commissioner Liaison, DPR
Mr. Harvard Fong, Senior Industrial Hygienist, WHS, DPR