



Department of Pesticide Regulation



Brian R. Leahy
Director

MEMORANDUM

Edmund G. Brown Jr.
Governor

TO: Dr. Marylou Verder-Carlos
Assistant Director
Pesticide Programs Division

FROM: Lisa Ross, Ph.D.
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Worker Health and Safety Branch
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[Original signed by L. Ross]

DATE: December 24, 2014

SUBJECT: COMPLETION OF METHIDATHION MITIGATION

This memorandum describes our findings in regards to the need for mitigation of methidathion, an agricultural miticide and insecticide.

In 1985, DPR placed methidathion on the high-priority list for risk assessment pursuant to the Birth Defect Prevention Act of 1984 (DPR 1997). In 2001, DPR's Methidathion Risk Characterization Document (RCD) concluded that, for the general public exposed to methidathion via food and drinking water, exposure was well below levels of concern for acute, subchronic, and chronic exposures (Lewis 2001). Margins of exposure (MOE) were at least 280, substantially more protective than the desirable MOE of 100 (Lewis 2001). However, the RCD estimated the carcinogenic risk from combined dietary and drinking-water exposure as ranging from 1.2 to 1.9 excess cancer cases in a million people. This estimate exceeds the risk level that is often considered acceptable, which is 1 excess cancer case in a million people (Lewis 2001).

Methidathion exposure has been mitigated by the 2010 order from the U.S. Environmental Protection Agency (U.S. EPA), accepting the registrants' voluntary cancellation of all methidathion products registered for use in the United States (Keigwin 2010). The U.S. EPA order prohibits sales of methidathion products after December 31, 2014. The order does allow end-users to use their existing stocks of methidathion products until their stocks are exhausted (Keigwin 2010). Nonetheless, since 2010, both sales and use of methidathion in California have dropped precipitously (Figure 1).

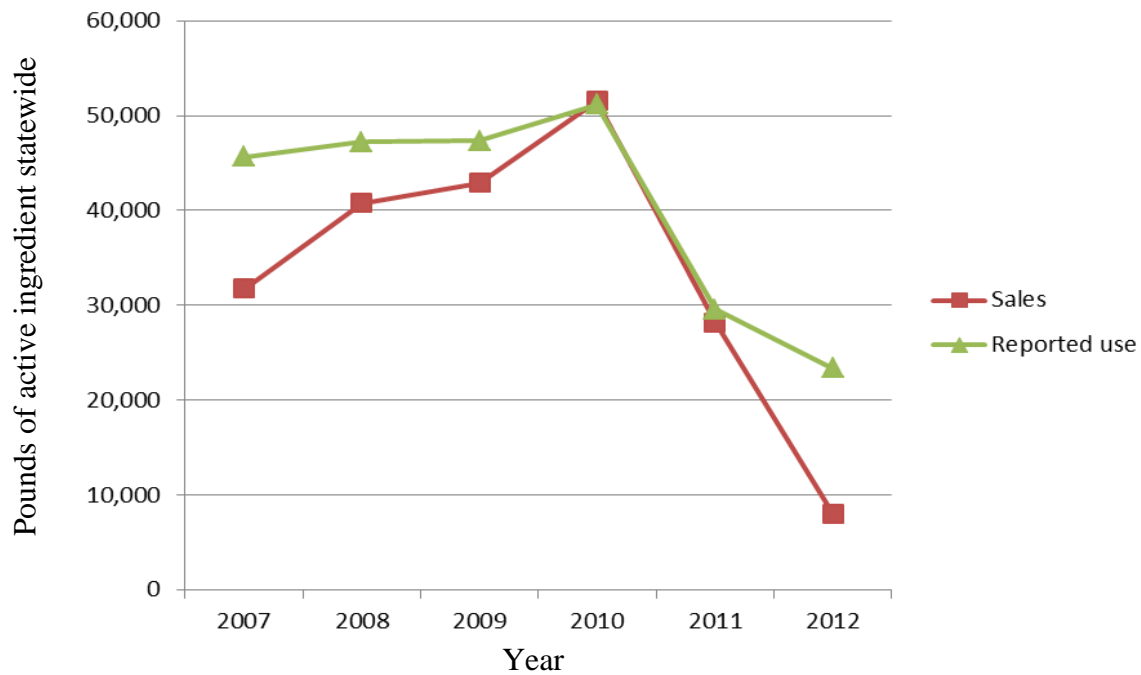
The most recent report of an illness within California related to methidathion use was in 2003. That report was of an applicator who developed difficulty breathing while applying a mixture of four pesticides, one of which was methidathion (DPR 2014).



Figure 1. Reported use and sales of methidathion within California.

Source of data on reported use: DPR's California Pesticide Information Portal (Cal-PIP) database
<http://calpip.cdpr.ca.gov/main.cfm> Query run on December 10, 2014

Source of data on reported sales: DPR's Reports of Pesticide Sold in California
<http://www.cdpr.ca.gov/docs/mill/nopdsold.htm> (accessed December 10, 2014)



Given the continued decline and low use of methidathion products, commensurate with the voluntary cancellation of all products in effect December 31, 2014, the Worker Health and Safety Branch finds that additional mitigation measures are not needed. Your approval of this conclusion is requested.

cc: Linda O'Connell, Environmental Program Manager I
Kevin Solari, Senior Environmental Scientist (Supervisor)

Attachment

APPROVAL

[Original signed by M. Verder-Carlos]
Marylou Verder-Carlos, Assistant Director

December 29, 2014
Date

REFERENCES

- California Department of Pesticide Regulation (DPR). 1997. Status Report: The Birth Defect Prevention Act of 1984. A Report to the Legislature. California Department of Pesticide Regulation, California Environmental Protection Agency, Sacramento, CA. Available at <http://www.cdpr.ca.gov/docs/legbills/reports/reg/bdpa/sb950q&a/sb950rep.htm> (accessed December 10, 2014)
- California Department of Pesticide Regulation (DPR). 2014. California Pesticide Illness Query (CalPIQ) [Online]. Available at http://apps.cdpr.ca.gov/calpiq/calpiq_input.cfm (accessed December 10, 2014)
- Keigwin, R.P., Jr. 2010. Methidathion; Cancellation Order for Pesticide Registrations. U.S. Environmental Protection Agency, Washington D.C. Federal Register 75 (105): 30824 - 30825. Available at <http://www.gpo.gov/fdsys/pkg/FR-2010-06-02/pdf/2010-12925.pdf> (accessed December 9, 2014)
- Lewis, C.M. 2001. Methidathion Risk Characterization Document: Dietary and Drinking Water Exposures. California Department of Pesticide Regulation, California Environmental Protection Agency, Sacramento, CA. Available at <http://www.cdpr.ca.gov/docs/risk/rcd/methidat.pdf> (accessed December 10, 2014).