



From the Director

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Key Facts About DPR's Proposed Methyl Iodide Decision

On April 30, 2010, after extensive scientific review, the Department of Pesticide Regulation (DPR) proposed registration of a new fumigant, methyl iodide, to replace methyl bromide. Methyl iodide has already been registered by the U.S. Environmental Protection Agency (U.S. EPA) and in 47 other states. However, we believe that the use controls imposed by U.S. EPA are not sufficiently health protective, so DPR will require significant additional use restrictions.

As the public reviews our proposed registration decision, it is important that key facts are understood.

- **Our Science Has Remained Consistent.** Risk assessments are not intended to recommend registration decisions or develop risk-reduction measures. They are designed to provide the foundation for decision makers, that is, the risk managers. This approach to risk management is used by environmental and health regulatory agencies throughout the world. As U.S. EPA explains, "The scientific risk assessment and its peer review provide the sound scientific underpinnings for a decision. However, it is only one of the many factors that a decision maker considers in arriving at a final environmental decision. . . . Risk assessment provides INFORMATION on potential health risks, and risk management is the ACTION taken based on evaluation of that and other information," including social, economic, and legal considerations.

DPR's risk managers, including myself, considered the risk assessment and the review done by other agencies and an external peer review panel when reaching our proposed registration decision. We also considered other information, including guidance issued by U.S. EPA and the World Health Organization for these types of decisions. This information helped us, as risk managers, decide if and how exposures to methyl iodide could be kept below unsafe levels. DPR concluded the answer is yes, with requirements for more health-protective measures than U.S. EPA imposes.

- **Food Residues:** Methyl iodide is not applied to food crops. Rather, it is injected into bare soil before crops are planted. It leaves no methyl iodide residues in either soil or food. In extensive field studies, methyl iodide residues could not be detected in harvested fruit. In short, methyl iodide use does not present a food safety concern.
- **Training:** Methyl iodide will not be used by untrained farmworkers. Doing so would be a violation of state law and our comprehensive use restrictions. In California, professional applicators who would use methyl iodide must have extensive safety training, a special fumigator license, and a site-specific permit from the local agricultural commissioner who can impose further use restrictions.

- **Ground Water:** U.S. EPA and DPR independently assessed the potential for contamination of ground and surface water. Using computer modeling and assuming worst-case environmental conditions, the conclusion was that methyl iodide is unlikely to affect water quality. To provide an extra margin of safety, DPR is proposing added controls to protect ground water, such as buffer zones around wellheads and application limits in vulnerable areas.
- **Buffer Zones:** DPR is proposing a minimum half-mile buffer zone around occupied schools, hospitals, nursing homes, and similar sites. Neither the public nor workers can be present in a buffer zone during the application and for 48 hours afterwards. The applicator is responsible for ensuring the area remains clear of people.

Residents in buffer zones are not forced from their homes during fumigant applications. However, it is not uncommon in rural areas for applicators to arrange for residents in a buffer zone to voluntarily leave their homes for a few days so fumigation can proceed. The applicator typically pays for all lodging and expenses. These agreements are voluntary and, if residents decline, no fumigation can occur.

- **Enforcement:** County agricultural commissioners enforce pesticide laws locally and levy penalties for violations. No other state has similar local enforcement. The commissioner also can impose additional restrictions, tailored to local conditions, over and above DPR's fumigant rules, already the strictest in the nation.
- **Respirators:** Face-sealing respirators required when using methyl iodide are the same as those used as proven worker protection throughout the chemical manufacturing industry. The U.S. Occupational Health and Safety Administration (OSHA) has tested half-face respirators like those required for methyl iodide and found that they meet the requirement to reduce inhalation of dangerous chemicals by at least 90 percent. DPR recently enhanced its respirator regulations to make them more stringent than federal law and ensure that pesticide applicators receive full protection and can safely use respirators. Our rules require a medical evaluation and fit testing before workers can use a respirator. The regulations prohibit workers from wearing face-sealing respirators if they have facial hair that interferes with the seal or valve. The respirators are designed so that sweating should not interfere with the seal. If a person wearing a respirator needs to remove it, they must leave the area where exposures may occur. They cannot just lift up their respirator and take a smoke break as critics have alleged.
- **Status of Methyl Iodide at U.S. EPA:** U.S. EPA officials stated that the agency would review the external peer review panel's report and DPR's revised risk assessment to determine whether any new scientific information was developed to warrant further examination at the federal level. However, as recently as this week, we received verbal confirmation from U.S. EPA officials that the agency does not plan to reevaluate its registration decision on methyl iodide at this time.

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