

February 22, 2011

To: Members, Committee on Environmental Safety & Toxic Materials
Members, Committee on Health

From: Assemblyman Bob Wieckowski
Chair, Assembly Committee on Environmental Safety & Toxic Materials

Assemblyman William Monning
Chair, Assembly Committee on Health

Subject: California Pesticide Policy and the regulation of Methyl Iodide

The Assembly Committee on Environmental Safety & Toxic Materials, along with the Assembly Committee on Health, will hold a joint hearing on February 22, 2011, to review the actions and policies of California agencies to regulate the use of fumigants and other pesticide products in California. **The hearing will address the need for science-based regulatory actions and the need to address multi-media environmental risk from pesticide use.**

Background

Methyl iodide: (also called iodomethane) is a preemergent fumigant used in agriculture. This means it is injected into the soil before crops are planted. The fumigant spreads through the soil to kill weed seeds, plant diseases, and nematodes. It can be applied by drip irrigation under a special protective tarpaulin, or injected into the soil using a tractor that automatically places a tarp over the ground after application.

Controlling Federal and California Law: Pesticides must be registered (licensed for sale and use) with the U.S. EPA before they can be registered in California. DPR's preregistration evaluation supplements and complements U.S. EPA's. Before a pesticide can be sold or used, both agencies require data on a product's toxicology and chemistry: How it behaves in the environment, its effectiveness against targeted pests, the hazards it poses to non-target organisms, its effects on fish and wildlife, and the degree of worker exposure.

Based on its acute inhalation toxicity, U.S. EPA designated methyl iodide as a federally restricted-use pesticide pursuant to section 3 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). FIFRA requires proper labeling of pesticides so that, if used in accordance with specifications, the pesticide will not cause an "unreasonable adverse effect on

the environment." Registered pesticides are to be used in accordance with the directions contained on the label. Sales and use of methyl iodide are limited to certified applicators and those under their direct supervision, thus controlling the number of persons with direct access to the fumigant. Title 3 of California Code of Regulations section 6400(a) states that any pesticide labeled as a "restricted use pesticide" pursuant to section 3 of FIFRA is also designated as a restricted material in California. Thus, methyl iodide is a restricted-use pesticide in California.

Generally, possession and use of a restricted pesticide is allowed only under a permit issued from the local county agricultural commissioner. State pesticide laws are enforced by these county agricultural commissioners, who can impose tougher restrictions tailored to local conditions. Pesticide applicators in California are required to obtain a permit from their county agricultural commissioner 24 hours before they wish to apply restricted-use pesticides.

DPR's oversight begins with product evaluation and registration and continues through statewide licensing of commercial and private applicators, pest control businesses and advisers, environmental monitoring, and residue testing of fresh produce. This statutory scheme is set forth primarily in Divisions 6 and 7 of the Food and Agricultural Code. Since DPR announced its proposal to register methyl iodide in April 2010, the use restrictions have been clarified and strengthened, including stricter buffer zones, a requirement that only DPR-approved highly retentive tarps be used, more ground water protections, reduced application rates and stronger protections for workers.

Criticisms & Concerns over Methyl Iodide: Despite DPR's strict regulations on paper, there is widespread concern about the safety of using methyl iodide. A report from the Scientific Review Committee (SRC) on methyl iodide to DPR summarized and highlighted these concerns. After taking comments from Arysta, the manufacturer of methyl iodide, and various advocacy groups, the SRC was convinced that the respiratory protection for the farm workers and growers is often inappropriate, inadequate, or inaccessible. Similar problems arose during the use of methyl bromide, methyl iodide's predecessor. Given that methyl iodide is a restricted-use pesticide because of its acute inhalation toxicity, this finding of insufficient respiratory protection is disturbing.

This concern was compounded by the fact that the only simulated field exposure study was done under cooler weather conditions and not in the heat of summer on a windless day. Both the inability to protect those who handle methyl iodide and the insufficient data were of chief concern to the SRC.

A lack of sufficient data translates to an inability to engage in complete risk assessment. What is known is that methyl iodide reacts with DNA and has long lasting mutagenic effects. There are legitimate concerns that methyl iodide is a carcinogen and possesses neurotoxic qualities, but the laboratory that conducted the key study was not able to detect neurotoxicity, only general toxicity.

Finally, the SRC emphasized its alarm over the absence of reliable data on methyl iodide's potential to contaminate groundwater. The SRC found the levels of iodide accumulation shown in the model calculations to be unacceptable. The State Water Resources Control Board agreed

that an effective soil profile and groundwater monitoring program for methyl iodide at application sites is essential to preventing or mitigating drinking water exposure.

Regulatory History: DPR gave notice of its proposed emergency action to designate methyl iodide as a restricted material on December 1, 2010, and the emergency regulations became effective December 20, 2010.

An "emergency" for purposes of emergency regulation means that a situation calls for immediate action to avoid serious harm to the public peace, health, safety or general welfare.¹ Unless a situation is expressly deemed in statute to be an emergency, an agency must make a finding of emergency by describing specific facts supported by substantial evidence that demonstrate the existence of an emergency and the need for immediate adoption of the proposed regulation. In addition, if the emergency existed and was known by the agency in sufficient time to have been addressed through nonemergency regulations, the finding of emergency shall include facts explaining the failure to address the situation through nonemergency regulations. A finding of emergency based only upon expediency, convenience, best interest, general public need, or speculation, is not adequate to demonstrate the existence of an emergency.²

Food and Agricultural Code §14004.5 authorizes the director, by regulation, to designate and establish a list of restricted materials based upon criteria which include danger of impairment of public health. Section 12825 of the same code permits the director to cancel the registration of, or refuse to register, any pesticide that [for example]:

- (a) has demonstrated a serious uncontrollable adverse effect;
- (b) does not have greater benefit to the public than it does detriment to the environment;
- (c) has reasonable safer alternatives;
- (d) is detrimental to public health and safety even when used properly.

DPR claimed that immediate action was necessary to designate methyl iodide as a restricted material. DPR stated that without the compliance oversight built into the permit process and the flexibility of requiring additional mitigating controls, the unrestricted use of methyl iodide could pose unacceptable risks to human health. "Therefore, immediate action is necessary to implement critical measures to ensure the protection of human health from the risks posed from local conditions."

The process of designating a pesticide as a restricted material requires a public comment period. DPR has faced criticism that it sought to fast-track final registration of methyl iodide—thereby avoiding the otherwise mandatory public comment period—by declaring an “emergency” when requesting the restricted material status.

Litigation: On December 30, 2010, a collection of environmental and labor organizations filed suit for declaratory and injunctive relief as against DPR and Arysta. Plaintiffs petitioned the California Superior Court to invalidate DPR's registration of methyl iodide, invalidate the

¹ Cal. Gov. Code § 11342.545

² Cal. Gov. Code § 11349.6(b)

emergency rulemaking, and prohibit the use of pesticides containing methyl iodide. The suit challenges the approval of methyl iodide for use in California on the grounds that it violates the California Environmental Quality Act, the California Birth Defects Prevention Act, and the Pesticide Contamination Prevention Act that protects groundwater against pesticide pollution. In addition, the suit alleges that DPR violated the law requiring involvement of the Office of Environmental Health Hazard Assessment (OEHHA) in the development of farmworker safety regulations and made an unlawful finding of emergency with its request for restricted materials status for methyl iodide. This pending litigation is before Judge Frank Roesch in the Superior Court of Alameda County.