

## Susana De Anda: Scientists: Methyl iodide is hazardous

Susana De Anda • Water • February 26, 2010

Those who ignore history are condemned to repeat it.

It's not hard to remember the use of soil fumigants DBCP and EDB in the Valley in the 1950s through 1970s and the toxic legacy it leaves with us today.

In Fresno alone, 20 percent of the city's wells were closed because of contamination by these pesticides, now known to cause both cancer and sterility in workers who formulated and applied the pesticides. Many Valley towns still face high water treatment costs for these chemicals.

In his guest commentary of Feb. 10, state Sen. Roy Ashburn, R-Bakersfield, explained that in 2007, under the Bush Administration, the USEPA registered methyl iodide as a soil fumigant.

He failed to add that this registration was completed despite the objection of more than 50 eminent scientists, including five Nobel laureates.

These scientists stated, "As chemists and physicians familiar with the effects of this chemical, we are concerned that pregnant women and the fetus, children, the elderly, farm workers and other people living near application sites would be at serious risk if methyl iodide is permitted for use in agriculture."

The letter goes on to explain, "Because of methyl iodide's high volatility and water solubility, broad use of this chemical in agriculture will guarantee substantial releases to air, surface waters and groundwater, and will result in exposures for many people.

"In addition to the potential for increased cancer incidence, EPA's own evaluation of the chemical also indicates that methyl iodide causes thyroid toxicity, permanent neurological damage, and fetal losses in experimental animals."

The letter concludes, "It is astonishing that the Office of Pesticide Programs is working to legalize broadcast releases of one of the more toxic

chemicals used in manufacturing into the environment."

In contrast, California's Department of Pesticide Regulation had the sense to slow down and conduct a more comprehensive risk evaluation and have this evaluation reviewed by a panel of scientists with expertise in evaluating chemicals for their potential to cause cancer and disorders of the nervous and reproductive systems.

The scientist's review report, released today, (or DPR's draft assessment and review panel at their initial meeting) found:†

"Based on the data available, we know that methyl iodide is a highly toxic chemical and we expect that any anticipated scenario for the agricultural or structural fumigation use of this agent would result in exposures to a large number of the public and thus would have a significant adverse impact on the public health.

"Due to the potent toxicity of methyl iodide, its transport in and ultimate fate in the environment, adequate control of human exposure would be difficult, if not impossible. This is clearly shown in the DPR risk calculations and the evidence of the toxicity of methyl iodide upon which these conclusions are based is compelling. In addition to the evidence for significant toxicity there is a lack of information that adds further uncertainty to the evaluation of the toxicity. We have concluded there is little doubt that the compound possesses



significant toxicity."

†And: "The Scientific Review Committee found it alarming that there were no reliable data on the potential of methyl iodide to contaminate groundwater. The modeled calculations we reviewed indicated the potential for unacceptably high levels of iodide to accumulate in water supplies."

Now California's Department of Pesticide Regulation needs to follow through and take the logical next step of refusing to register methyl iodide as a soil fumigant to prevent a very real threat to our health and scarce groundwater supplies.

Alternatives to soil fumigation include crop rotation, soil solarization, use of green manure treatments, and steam treatment of nursery container stock are already available.

Groundbreaking research on disease-resistant varieties, anaerobic soil disinfestation (which uses wet soils and decomposing organic material to kill disease pests) and steam soil treatment are coming out of the University of California and show great promise as both safer and easier-to-use alternatives.

Commodity groups are helping to fund this research because of the expense and complexity of using soil fumigants.

Our political leaders can and should play a constructive role in this transition instead of ignoring history and misrepresenting the facts at hand.

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