Industry advocates fear possible MSMA ban

by Heather Wood

Some in the industry are speaking out against the Environmental Protection Agency's intention to cancel the reregistration of an older herbicide, saying there would be no alternative for the removal of some weeds if that happens.

The EPA released a reregistration eligibility decision about organic arsenical herbicides, which includes the herbicide monosodium methanearsonate. There are about 90 end-use products that contain MSMA, according to the EPA. It's most commonly used on turf and cotton crops.

MSMA is used to combat dallisgrass and other members of the paspalum family, as well as to eradicate crabgrass. It's primarily used in the southern United States.

The evaluation of the chemicals was mandated as part of the Federal Insecticide, Fungicide and Rodenticide Act, which calls for all products with active ingredients registered before Nov. 1, 1984, to be studied. Thus MSMA, which originated in the 1960s, qualifies for the evaluation.

"This process, called reregistration, considers the human health and ecological effects of pesticides and results in actions to reduce risks that are of concern," says Ernesta Jones, an EPA spokeswoman.

The EPA's process provides a 60-day public comment period before a final decision is made. The document was released Aug. 5, and all responses were being accepted until Oct. 10.

The industry responds

Some industry advocates say they find holes in the study and are hoping the EPA will reverse its decision. Tim Murphy, a turfgrass weed scientist at the University of Georgia, co-authored a letter to the EPA with seven other professors from the southeastern United States outlining the reasons they disagree with the EPA's assessment.

"Practically speaking, it's not clear to
Jones responds: "Florida is described as an area of concern because of its very sandy soils and shallow water tables with golf courses particularly susceptible to leaching because they typically have well-drained soils and are heavily irrigated," she says, referencing the RED. "Similar environments, within Florida and nationally, would be considered to be highly vulnerable," she says, referencing the RED. "These include areas with shallow water tables, low background (naturally existing) arsenic levels and well-drained soils to which arsenicals to not sorb strongly."

Michal Eldan, Ph.D., is chairperson of the MAA Research Task Force, a coalition of three MSMA producers. The task force is dedicated to the safe use of MSMA and disodium methanearsonate. Like Murphy and his colleagues, the MAA Research Task Force penned a letter disagreeing with the EPA's decision. Eldan says the task force presented the EPA with results of modeling to demonstrate that MSMA's contribution of inorganic arsenicals was below what the EPA defined as the accepted level. The EPA then lowered the acceptable level, Eldan says. "It's like a moving target," she says about the EPA's requirements. The MAARTF had a consultant, Waterborne Environmental International, create a model in which a supposed MSMA was used at the highest frequency possible, on every square inch of a golf course with all the MSMA transforming to the more toxic inorganic arsenical. The model represented levels that are never as high normally, Eldan says. "If you get good results with the worst-case scenario, you don't have to worry, but if you have results that are unacceptable, you have to refine the model for more reasonable assumptions," she says.

With these worst-case scenario results, the model shows the levels of inorganic arsenicals contributed exceeded 10 parts per billion — the EPA's stated acceptable limit at the time, she says. The task force then presented to the EPA a new model that scaled down the hypothetical MSMA usage to an amount more likely to be used on a golf course. Eldan says that when the task force presented this model to the EPA, the agency responded that the accepted contribution level was three parts per billion. This happened twice, she says, and each time task force consultants scaled the model down further to be more in line with the label's golf course usage instructions (for example, application as a spot treatment four times a year, and only on fairways). The
RED cites the original model presented, which supposes MSMA is applied at the highest possible amount.

It got to the point where the EPA told the task force the accepted contribution level was 0.02 parts per billion, Eldan says, pointing out that's less than analytical methods are capable of distinguishing.

Finding a replacement
MSMA is the only herbicide that can successfully eradicate dallisgrass, Murphy says.

"Registration cancellation of the organic arsenical herbicides places an undue hardship on turfgrass managers attempting to control a weed that severely lowers the value of his/her commodity," reads the letter co-signed by Murphy.

Others in the industry are pointing to other effects they say the reversal of registration could cause.

"We know it's an economic issue for sod producers," says Stuart Cohen, president of Environmental & Turf Services, a consulting firm retained by the MAA Task Force.

"If they allow weeds to grow in the sod and they sell it, the buyer will find someone else to buy from in the future. Superintendents and green committees don't like to have broad areas of weeds on their tees and fairways."

The EPA report states many alternatives exist to control weeds in the absence of organic arsenicals. It names flauzifop and dithiopyr as chemicals that have postemergent control and dithiopyr or pendimethlin for preemergent control of crabgrass. It describes the primary method of weed control as maintenance of high quality turf.

"However, when chemical control of grass weeds is needed, typically, two or more alternative chemicals would be required to achieve weed control comparable to the organic arsenicals," the report states.

The RED concludes that because there are alternatives to using MSMA, the benefits of the compound don't outweigh the risks.

Although he doesn't agree with this outcome, Murphy is glad such oversight occurs.

"I'm glad we have agencies that are reviewing the pesticides that we use and the pharmaceutical drugs we take," he says. "They're charged with trying to make sure what's out there is only of low risk."

Murphy hopes end users of the herbicide will let the EPA hear their concerns no matter which side of the fence they're on.

The EPA's RED can be viewed at www.epa.gov/oppsrrd1/reregistration/methanearsonic_acid/.
delivered in person.

Jones says the EPA will review any comments submitted and decide how to proceed from there. An official response will be released. If the ruling stands, registration would be canceled on all organic arsenicals studied. There would then be a period for any who disagree to request a hearing. This is the expected course of action.

"The EPA considered submitted human health and environmental fate data as well as available open literature in its reregistration eligibility decision," Jones says. "Based on available data, the EPA is unlikely to change its conclusions. If previously unsubmitted data were to become available, the EPA would evaluate these data and potentially revise its decision as appropriate."

To read the EPA's report on MSMA and other organic arsenicals, visit www.epa.gov/oppmsgl/reregistration/methanearsonic_acid. GCN

Tweaking the Tour
Agronomy department adds two positions

by John Walsh

The PGA Tour is tweaking the structure of its agronomy department to strengthen it.

Heading the department is Cal Roth, vice president of agronomy, who took over for Jon Scott, who left the PGA Tour to work with Nicklaus Design as chief agronomist.

"We're fine tuning the operations of the agronomy department, which Jon left in great shape," Roth says. "My transition has been smooth thanks to Jon and the quality and experience of the existing staff."

After an evaluation, it was decided the agronomy department needed to add two positions: a PGA Tour agronomist, which has been filled by Bland Cooper, who came from ValleyCrest Golf Course Maintenance, and a director of agronomy, which the Tour is in the process of filling.

"What that does is structure the department so we have a director of agronomy for the TPC clubs and one for competitions," says Roth, who's been with the PGA Tour for 23 years.

There are two divisions within the agronomy department: one for competitions and another for the TPC clubs. Regional director Collier Miller will take over as director of agronomy and golf course maintenance operations for the TPC clubs, filling the vacant spot created when Roth left to fill Scott's position.

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