BACK-AT-THE-OFFICE

Recording hazardous waste water

IF YOU HAVE NOT ALREADY REVIEWED your operation for compliance, get started on the process with the following general checklist. Also, individual states and localities may have even more stringent standards, so check with your state and local authorities to make sure that you are in compliance with their rules *(see page 9 under "Regulatory Watch").* ■

If you check any of the following items, you probably have a compliance problem.

HAZARDOUS WASTE WATER CHECKLIST

PROBLEM MATERIALS

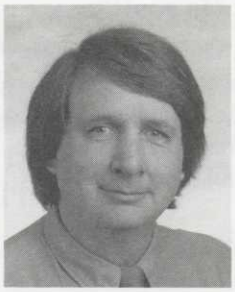
- ❑ Canceled pesticides
- ❑ Unused, left-over tank mixes that will not be recycled
- ❑ Materials considered to be carcinogenic
- ❑ Spill clean-up residues in quantities exceeding 220 lbs. or 1/2 of a 55 gal. drum
- ❑ Unusable mixture spills in containment areas from mixing or loading operations
- ❑ Left-over mixes from pesticides designated as hazardous
- ❑ Pesticides or pesticide mixtures placed in unmarked containers

PROBLEM CONTAINERS

- ❑ Unrinsed pesticide containers
- ❑ Pesticide containers that have been rinsed less than three times
- ❑ Triple rinsed containers that have not been drained for 30 seconds
- ❑ Empty paper pesticide containers that have plastic liners and have not been triple rinsed

PROBLEM PRACTICES

- ❑ Dumping tank rinse water onto ground or into drains
- ❑ Storing left-over tank rinse water that is not to be recycled
- ❑ Storing left-over mixes of materials designated as hazardous and non-hazardous
- ❑ Burning rinsed pesticide containers contrary to labeled instructions
- ❑ Storing old or out of date pesticides
- ❑ Having any leaking pesticide containers
- ❑ Washing the outside of pesticide application equipment on the application site within 300 yards of a well, creek, pond, lake, drainage ditch, or storm drain.



Posting: It's a matter of courtesy

by Christopher Sann

POSTING INVOLVES PLACING two or three small warning signs around a site after applying a pesticide. Sounds fairly simple, but some people's perceptions of it are clouded by the complexities of the environmental awakening and the whole series of related controversies that have occurred over the last 10 to 20 years.

Posting is a required procedure around agricultural fields, orchards and nursery growing areas, where it is primarily aimed at protecting workers. Posting tells the workers what material has been applied and how long they should wait before re-entering a treated site.

Is posting a big imposition on our industry? Not in terms of costs. From a labor stand point it might take one worker an average of three minutes per location to get the signs from the truck and place them around a site. The cost of the labor to place the signs should be about 49¢, assuming a wage rate of $7.50 per hour with a benefit package that costs 30%. The signs, if bought in quantity, should cost about 5¢ apiece—with a cost of 10¢ per site, if an average of two signs are used per site. Thus, the cost of the labor and the signs amounts to about 59¢ per site.

Does posting somehow represent a singling out of our industry? Not at all. The standards for notifying workers and the general public about potential hazards are going up for every industry and every line of business. Despite the inevitable discomforts and disagreements involved in any major change, we are all better off for it in terms of costs, safety, good labor relations, and good public relations.

Getting to where we are today has not been easy, but we have come a long way. Companies that used to tell everyone outside of senior management to mind their own business now have extensive safety and community outreach programs. They tout their safety records and their environmental "due diligence" in their advertising. These issues have gone from skeletons in the closet to selling points. There is still a fair amount of foot-dragging, but many people have realized that there are advantages to getting ahead of the power curve on this issue.

An idea whose time has come

In fact, quite a few people support the idea of posting:

- ENVIRONMENTALISTS

From the proverbial 'wet paint' signs of painters and the 'wet floor' signs used by janitors to the 'please excuse our progress' signs used by highway departments, this kind of courtesy is just plain good business.

- FEDERAL, STATE AND LOCAL government regulators
- MANY TURFGRASS MANAGERS
- MANY HOME OWNERS
- AVERAGE CITIZENS, ALL SIZES, SHAPES

PLCAA (the Professional Lawn Care Association of America) supports the idea. At a recent congressional subcommittee hearing to re-authorize FIFRA, PLCAA recommended requiring all lawncare operators to post sites on which they apply pesticides.

Posting will help notify people to take care when entering the area where a pesticide application has been made. It will notify post office workers, service personnel, delivery people, people walking their dogs, home owners coming home from work, housewives coming home from running errands, latch key kids coming home after school—anyone who might walk onto a treated area. These are all excellent reasons for requiring the posting of pesticide treated turf areas. Taken in toto they provide a overwhelming reason for the adoption of posting requirements on the federal level.

All that having been said—there is one more reason that outweighs all of the above. Put the issue on a personal level. If I am going to apply a pesticide to a turf site, posting the site is a matter of courtesy. From the proverbial "wet paint" signs of painters and the "wet floor" signs used by janitors to the "please excuse our progress" signs used by highway departments, this kind of courtesy is just plain good business.

A modest proposal

IN FACT, I THINK TURF MANAGERS should take this concept of "just plain good business" one step further. I propose that all turfgrass managers voluntarily agree to make a major effort to see that all non-target applications of any material applied to turf sites be removed from any surface where it might become a source of non-point pollution. Put more simply, we should remove any applied materials that have landed on roads, sidewalks, driveways and any location where water may move the materials into ponds, creeks, rivers, bays or any body of water.

From a practical standpoint, granular applications should be swept or blown from these surfaces. Liquid applications require that the applicator be careful to avoid spraying non-target areas.

As practicing turfgrass ecologists—or at least as professionals who read the handwriting on the wall, we should make sure that our activities are not the source of any potential pollution. It is not only the correct thing to do, but any pollution that might develop from the failure to remove these non-target applications could prove to be disastrous to an industry that is struggling to prove to society in general that we are competent professionals and deserving of society's trust. ■

REGULATORY WATCH

Fed issued "final" rules on training for workers who transport hazardous materials

THE U.S. DEPT OF TRANSPORTATION has issued final rules governing the minimum training requirements for workers who transport hazardous materials. Every two years employees, who handle or transport such materials must receiving training aimed at increasing their general awareness as well as specific job and safety training.

Industry group issues new standardized MSDS format

THE CHEMICAL MANUFACTURERS ASSOCIATION reports that it has established new voluntary standards for the format for Material Safety Data Sheets (MSDS). The new format simplifies the reporting of MSDS information and makes it more consistent.

Product labels are no substitute for MSDS's in California

AS OF THIS PAST JANUARY, California began requiring that manufacturers, distributors, and dealers provide MSDS's directly to pesticide purchasers. Unlike many other states, California had exempted this requirement and allowed the pesticide label as a substitute for MSDS's.

Ohio puts labeling of possible carcinogens on the ballot

THE OHIO SUPREME COURT has let stand a carcinogen labeling proposition set to appear on the ballot in November. If approved by Ohio voters, the proposition will require extensive labeling of products that are possible carcinogens or that pose reproductive threats. In addition, chemical companies, farmers and others will have to issue warnings to area residents of possible risks.

Hazardous waste water generator

MANY COMPANIES ARE STILL IN THE PROCESS of determining how the hazardous waste regulations of the Resource Conservation and Recovery Act (RCRA) apply to their operation. Here are two sources of additional information:

- "Understanding the Small Quantity Generator Hazardous Waste Rules: A Handbook for Small Business". Call the EPA's RCRA/Superfund Hotline at **1-800-424-9346**.
- Information packets are also available from several companies that specialize in helping small companies with regulatory compliance, including

  Compliance Corp. of America Inc.
  The Woodland Bldg.
  4243 Dunwoody Club Drive, Suite 103
  Dunwoody, GA 30350-5611. ■

THE LATEST WORD ON . . .

Laser guided fertilizers?

WELL, NOT QUITE—but two universities are testing a new laser-based sensing system for measuring nitrous oxide emissions from agricultural fields. The initial results of the laser testing found higher than anticipated levels, which indicates that the fertilizers applied to the fields are not being used as efficiently as had been expected. As this technique is refined, it may help the turf management industry to improve both the efficiency of turf fertilizers and the techniques and management strategies that are used to apply fertilizers.

Earthworms

A STUDY OF THE EFFECTS of 17 commonly used turf pesticides on earthworm populations has shown that several materials produce high death rates and have residual effects that can last up to five months. Single applications of benomyl, ethoprop, carbaryl, or bendiocarb produced high earthworm death rates of 60–99%. Other insecticides, including diazinon, isofenphos, trichlorafon, chlorpyrifos, and isazophos caused less severe mortality rates in other tests.

Another recent study of earthworms showed that, over a 23-month period, net loss of organic matter is greater and microbial activity is higher in thatch layer samples that contained earthworms than in samples from which earthworms were excluded or eliminated by insecticide use. The earthworms deposited large amounts of mineral soil into the thatch layer samples.

Billbug biology and susceptible varieties

A TWO-YEAR STUDY IN EASTERN NEBRASKA found that adult billbugs emerge from their over-wintering homes in the topsoil in April. Found in the thick thatch layers above the soil, they mated and laid eggs and died as new adults emerged in August. The highest number of billbug eggs were found in the lushest stands of bluegrass at the sites. During the early summer of both years, the naturally occurring larval stage of an unidentified parasite was found inside varying numbers of adult billbugs.

A recent survey of pure stands of various varieties of bluegrass, tall fescue, perennial ryegrass, and creeping fescues found that they were all hosts for the four species of billbugs found in New Jersey. In an associated laboratory test, billbug survival rates in Kentucky bluegrass, ryegrass, tall fescue and bermudagrass were tested. With the exception of the bermudagrass—a less desired host—there was no difference in the three remaining species.

High maintenance impact on fine fescues

FINE FESCUES ARE AN EXCELLENT SPECIES for low to no management situations. They are particularly well-suited to no maintenance situations that tend to the dry side. In a long-term test of the survivability of different turf species, mixtures of different varieties of bluegrass, ryegrass, and fine fescue were seeded, tended until established, and then left with no maintenance other than periodic mowing. After two to three years, the ryegrasses faded, and after five to seven years the bluegrasses faded, leaving the fine fescues as the dominate variety in the test stands. Under these low maintenance conditions, the predominately fine fescue turf stands remained stable for years.

The trend toward higher levels of maintenance can upset that stability, according to another study. As long as fine fescue is maintained under low to moderate management conditions, it has performed well. However, many fine fescue areas are increasingly managed at higher levels, and these stands showed increasing deterioration due to increasing insect and disease damage. Fine fescues are vulnerable to chinchbugs, sod webworms, billbugs, leaf spot, and Pythium diseases.

Dethatching and chinchbug

DETHATCHING CAN HELP reduce chinchbug problems, according to a Michigan study. When chinchbug populations were compared 24 hours after being released, the populations were an average of 329% higher on the thatchy plots than on the dethatched plots.

Also, in a random survey of over 100 home lawns, thatch thickness was greater on infested lawns by an average of 53%. The study looked at other variables, including clipping weight, chlorophyll content and grass species. The data indicated that thatch levels and fine fescue content were the only variables that showed a definite correlation. The higher the fine fescue content and the lower the bluegrass content, the higher the incidence of chinchbug infestation. ■

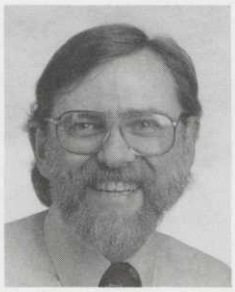
LETTERS TO THE EDITOR

Readers who wish to comment on any aspect of the articles, news items, or commentaries published in *Turf Grass Trends*, or on any issues or concerns raised by them, should do so by writing to:

TURF GRASS TRENDS
2070 Naaman's Rd., Suite 110, Wilmington, DE 19810

Please include a return address. Where appropriate, and as space allows, we will respond to the letters we publish. We reserve the right to edit all letters. All published letters become the property of *Turf Grass Trends*.

Hysteria



by Russ McKinney

THE WORD ITSELF goes back to ancient male notions about women. Behavior that men saw as excessive anxiety and emotional excitability were attributed to disturbances in the uterus.

Hysteria still means over-reaction, but it is, of course, not a feminine exclusive—nor is it confined to the public sector. Industries are just as capable of reacting hysterically—and so are news media and professional environmentalists. In fact, the whole development of environmental awareness over the past 20 years and the resulting, and still ongoing, regulatory changes have been dogged from the beginning by hysteria on all sides. No doubt the hysteria has made everyone's job more difficult.

In an age of unprecedented information, when we all have more facts about everything, why is hysteria still a problem? The short answer is because people's lives, their livelihoods, and their futures are at stake. That clouds and compromises everyone's judgment. It also means that most of us tend to approach the unknown, not with scientific curiosity or journalistic impartiality, both of which require extensive training and experience to develop, but with hardened hypotheses . . . guns at the ready.

The recent comments by Dale Miller, chief executive officer of Sandoz Agro, are based on a similar point. Speaking at a meeting of the National Association of County Agricultural Agents, Miller said, in effect, that pesticide producers should put their guns down and put their energy into cleaning up their act. Over-glowing reports about benefits and inadequate responses to the real problems created by the industry have destroyed its credibility with the public, according to Miller. The question is how to get it back.

I recommend facing "the facts." As a business reporter, I repeatedly found that the facts were a better guide through the forest than strongly held pre-conceptions—my own or anyone else's. In getting to know the field of turfgrass management, I have been impressed by the array of complexities involved and the multitude of fronts on which real progress is being made. Stick with the facts: if they aren't on your side, then you are going the wrong way.

Part of the promise of new knowledge, which represents liberation from hysteria and ignorance, is lost, because we abuse it—by using it to help rationalize our existing ideas, values, and work habits, instead of using it to improve them. This is true for environmentalists as well as industries, and journalists and academic researchers also have to maintain constant vigilance against this tendency.

Of course wonderful as our new knowledge is—many questions always will remain unanswered. There always will be plenty of room for prejudices, conjectures, and honest differences of opinion. So, we all need to respect our shared limitations and our fundamental right to have different opinions.

Ultimately, given the cloud of self-interest and the limitations of our objective knowledge, I think we always will need checks and balances—like the Constitution and the marketplace. Arguments for depending on self-imposed restraints sound much better than the reality of what they produce, which is frequently no real restraint, no real protection for the other sectors involved, and no real progress.

In his controversial remarks, Miller pointed out that "every time we do not speak out or act against the few bad actors in agriculture, we are responsible for the creation of more restrictive laws and regulations." His point is well-taken. If you feel your industry is hurt by over-regulation, you first need to look at what you yourselves are doing to help create a climate of public distrust.

How can the industry regain its lost credibility? First, stop trying to blur the distinction between impartial editorial content in the media and paid advertising. The media shouldn't be for or against anyone. They should be looking for the facts, and that is what you should give them. If you want to advertise your products or your views, pay for the space—and don't try to disguise it as something that it isn't.

Most importantly, if you create bad news, stick to the facts and deal with the consequences. I have dealt with people and companies involved in major industrial accidents, charges of conflict of interest, and a host of other tacky situations. From my experience, the most effective crisis managers weren't the ones who pretended there was no crisis.

On the other side of the coin, if you want to create good news, earn it the old fashioned way: do something newsworthy. ■

JUST OUT

Automata improves soil moisture sensor

Replacing the use of several one-point sensors needed for averaging soil moisture, the new Aqua-Tel sensor is capable of a distributed measurement averaged over 30 inches. The sensor is compatible with Automata's Infrared or Radio Data-Lynx computerized telemetry system, which allows remote monitoring of soil moisture and direct control of irrigation.

For more details, call or write to:

Automata, Inc.
16216 Brooks Rd., Grass Valley, CA 95945-8816
916-273-0380

Reinco fields new mulch trailer

Reinco has introduced a new mulch trailer that features a 5 1/2 ft. x 11 1/2 ft. (63 sq. ft.) storage area and working platform encircled by a 3 ft. safety railing and Reinco's 35 H.P. Model TM7-30 Power Mulcher. The tandem axle trailer can handle up to two tons of hay or straw mulch, and the mulching machine can blow up to 60 ft., in still air, at a rate of up to six bales per minute.

Available options include discharge hose, debris vacuum, an emulsified asphalt pumping system, and a Deutz air-cooled diesel engine.

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