Perhaps more than any other sport, golf is a game for the senses. A player on a course looks around and sees brilliant green expanses, often woven through forests and along the seacoasts, hears the songs of birds and the wind in the trees, and smells fresh cut grass, perhaps tinged with pine, jasmine, or whatever other foliage graces the site. A golf course is a multi-sensory experience, which is why most golfers rank "just being out on the course" equal with "the challenge of the game" when naming two of the main reasons they play.

Unfortunately, unlike mowing, where the byproduct (cut grass) has a rather pleasant scent, the herbicides, pesticides, and fertilizers that are so vital to golf course maintenance can have a less-than-appealing odor. Combined with people's concern (some say undue) about these products in general, these odors cannot only lead to reduced overall course aesthetics, but also to problems of public perception.

Still, most golf course superintendents can't get by without these useful products. So how can they balance intelligent, well-managed pesticide, herbicide, and fertilizer application with olfactory aesthetics and good public relations?

One company, Epoleon Corporation of America, based in Carson, CA, believes some of the answers are held in its N-100 product, a biodegradable, emulsifiable deodorizer that neutralizes pesticide and fertilizer odors.

According to the company, the product dissolves and neutralizes obnoxious gases by reacting to both acidic (hydrogen sulfide, methyl mercaptan) and alkali (ammonia, trimethylamine) odors. Epoleon says the product is non-toxic and environmentally safe—it will not harm animals, fish, birds, or humans—and adds that it will not change the efficacy of the products it deodorizes. The firm emphasizes that the product actually deodorizes, rather than simply masking scents.

The firm is quick to point out that the pure ingredients of insecticides, such as chlorpyrifos and pyrethroids have no odors themselves. Malodors occur from halogen substances, which are impurities such as chlorine, fluoride, iodine, and bromine. The product, stresses the company, will not react with the actual insecticide ingredient and, therefore, will not change the efficacy of the insecticide's abilities.

"The deodorizer works very well," says Jeff Leathers, superintendent of the Saratoga Golf And Polo Club in New York, who is using the product to deodorize a particular pesticide. "The active ingredients are not the problem—it's the carrier which has the odor. You still have a trace of the odor when you use the deodorizer, but it makes a significant difference."

Perhaps the most obvious application for the product is eliminating offending odors caused by organic fertilizers and chemicals on turf areas. For these areas, the manufacturer recommends adding to the diluted mixture approximately one part of Epoleon N-100 for every 10 parts of the chemical or pesticide concentrate being used.

Aeration can go a long way toward eliminating odors from lakes and ponds on a golf course, but for standing water features which don't have aeration, or aerated water amenities which can, for whatever reason, use a little help, the product can also be used. The deodorizer can be diluted 50 times with water and sprayed on the water's surface, or dripped into the pond or lake at 0.001 percent against the total volume of water.

While the product may not provide the answer to every golf course odor problem, its applications look promising. The company has also released another deodorizer, N-7C, which it recommends for garbage and grass clippings. Both may be useful in reducing unpleasant odors and keeping the overall smell of a golf course, this unseen yet powerful sensory element, fresh and natural.