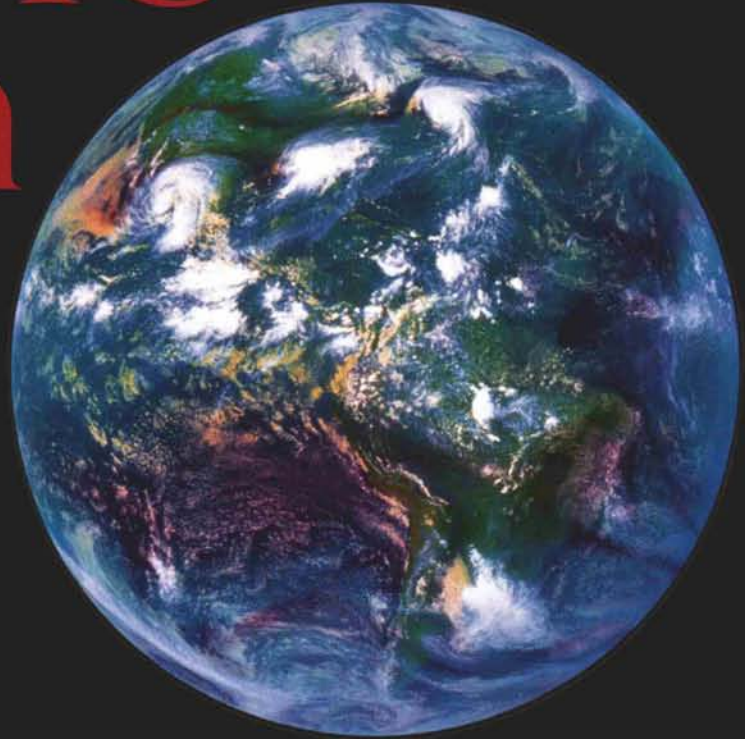


Ozone Action Days in Golf Course Management



Middle and late summer—this is the time of year we expect to hear weather forecasters talk about or issue warnings for “ozone action days.” A typical ozone action day (OAD) is a busy day with daytime high temperatures at or above 85 degrees Fahrenheit, high humidity and poor air circulation (winds calm to 8 mph). An ozone action day has a good potential for poor air quality aggravated by activities such as emissions from diesel, gas and two-cycle engines; gaseous emissions while fueling equipment; emissions when using an oxygen and acetylene torch; industrial emissions; etc. The ozone on an OAD is especially influenced by these activities between the hours of 10:00 a.m. and 6:00 p.m.

*The recipe for
an ozone action
day: heat, humidity,
stagnant air.*

My facility joined Partners for Clean Air in 1995. Partners for Clean Air is an alliance of participating Chicago-area businesses joined together in an effort to establish methods of eliminating or at least minimizing activities thought to damage the ozone (and wreak havoc on pure, fresh air). All participants in Partners for Clean Air receive a bulletin via fax alerting them the day prior to an ozone action day. The bulletin contains a list of ideas and basic examples to follow so that each individual business manager can form a customized set of activities to be put into effect on OADs. The following are the guidelines and practices that Orchard Hills uses on ozone action days:

1. Begin work at 5:00 a.m. rather than 6:00 a.m.
This allows for work to be accomplished earlier in the day.
2. Encourage car-pooling among employees.
3. Fuel equipment before 10:00 a.m.
4. Use oxygen and acetylene torch prior to 10:00 a.m.

5. Use welder before 10:00 a.m.
6. Perform almost all jobs requiring the use of diesel, unleaded or two-cycle fuel prior to 10:00 a.m.
7. Reserve time after 10:00 a.m. to perform jobs NOT requiring the use of engines. Some examples are: pick up branches and litter; cut cups; hand-rake edges of traps; service ball-washers, towels and garbage; de-weed traps and flower beds by hand; adjust high and low plugs on the greens; fix ball marks on greens; trim with a knife around sprinkler heads, yardage markers and CDGA markers; seed and soil divots; clean shop, lunch-room and restrooms; grease and service equipment without running engines, etc.
8. Use electric carts for general transportation of maintenance staff after 10:00 a.m.
9. Postpone lunch break until 10:00 a.m.
10. Schedule work so that employees may avoid rush-hour traffic.

The above guidelines can be adapted for almost any golf course management setting. For additional information on Partners for Clean Air, see story at right.



Partners for Clean Air and Clean Air Counts are both voluntary programs to reduce ozone-causing emissions and help the Chicago metropolitan region maintain compliance with the one-hour ozone standard and meet the newly adopted eight-hour ozone air-quality standard.

www.cleantheair.org

Partners for Clean Air focuses on ozone action days—days that the states forecast will have high ozone (smog). Organizations that join Partners are notified the day before an ozone action day and asked to implement their emission-reducing measures the next day. These measures can include deferring lawn-mowing, painting, driving or refueling vehicles; encouraging employees to take transit or bike to work or do a brown-bag lunch; and postponing manufacturing processes that release VOCs.

www.cleanaircounts.org

Clean Air Counts promotes a variety of strategies to reduce ozone-causing emissions from business, government, development and households. These strategies focus on nonregulated activities and include using low-VOC paints and cleaning products, converting lawns to natural landscaping, implementing energy-efficient lighting, purchasing low-emitting vehicles and holding lawnmower buy-back/replacement programs. Participants' annual activities will be quantified for state credit toward meeting the air-quality standard. The initiative is a project of the Metropolitan Mayors Caucus, the U.S. Environmental Protection Agency, the Illinois EPA and the Delta Institute.



Air Quality Guide for Ozone

Air Quality	Air Quality Index	Protect Your Health
Good	0-50	No health impacts are expected when air quality is in this range.
Moderate	51-100	Unusually sensitive people should consider limiting prolonged outdoor exertion.
Unhealthy for Sensitive Groups	101-150	Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
Unhealthy	151-200	Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
Very Unhealthy (Alert)	201-300	Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.