

# Fertilizer

## Fact Sheet



### WATER POLLUTION

Sources of water pollution like industrial wastes from factories have been greatly reduced in recent years. Now, more than 60% of water pollution comes from things like cars leaking oil, fertilizer from farms and gardens, and failing septic tanks. All

these sources add up to a big pollution problem. So, believe it or not, the biggest source of water pollution today is not industry – it is actually households like yours. But each of us can do small things to help clean up our water. And it starts with realizing that *our sewers and storm systems are separate – what goes into storm drains flows directly into the environment, untreated.*

### WHAT'S THE PROBLEM WITH FERTILIZERS, PESTICIDES, AND HERBICIDES?

Fertilizer isn't a problem if it is used carefully. If you use too much fertilizer or apply it at the wrong time, it can easily wash off your lawn or garden into storm drains and then flow untreated into lakes or streams. Just as in your garden, fertilizer in lakes and streams fuels plant growth. Fertilizers contain "nutrients" such as nitrates and phosphates. Excess nutrients over-stimulate the growth of aquatic plants and algae, which clog our waterways and block light to deeper waters while the organisms are alive; when the organisms die, they use up dissolved oxygen as they decompose, causing oxygen-poor waters that support only diminished amounts of marine life. Such areas are commonly called *dead zones* (like in the Gulf of Mexico every spring).

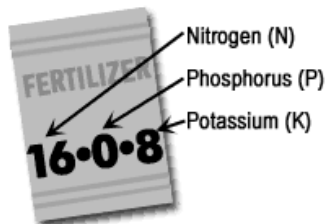
### FACTS AND FIGURES

- Phosphorus (the middle number on the fertilizer bag) is "junk food" for algae. One pound of phosphorus can produce 10,000 pounds of wet weeds and algae.
- Pesticides that get applied to farm fields and roadsides (and homeowners' lawns) run off into local streams and rivers. It is tempting to think this is mostly a farming problem, but on a square-foot basis, homeowners apply even more chemicals to their lawns than farmers do to their fields!
- Water utilities in the Midwest spend \$400 million each year to treat water for the chemical pesticide Atrazine.

### WHAT YOU CAN DO

How can you fertilize and help keep our waters clean?

- Use fertilizers, pesticides, and herbicides sparingly. Many plants do not need as much fertilizer or need it as often as you might think. Whatever you put on your lawn could find its way into the stream.
- Choose fertilizer with a low phosphorus number (middle number). Only newly-seeded lawns or phosphorus-deficient soils require phosphorus.
- Don't fertilize before a rain storm.
- Consider using organic fertilizers; they release nutrients more slowly.
- Sweep fertilizers and other chemicals that get on the driveway/sidewalk back onto your lawn to keep them out of our storm drains.
- Use commercially available compost or make your own using garden waste. Mixing compost with your soil means your plants will need less chemical fertilizer and it puts your waste to good use.



For more information on keeping our water clean, contact the City of Carmel Engineering Department at 317.571.2441

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