

H₂O LINE



City of Grand Prairie
Environmental Services Dept.
P. O. Box 534045
Grand Prairie, TX 75053-4045

972/237-8055

FALL 2006

Environmental Compliance Workshop

On September 20, 2006, Water Quality staff will be holding the annual pretreatment awards and pollution prevention program.

The September meeting will be held at the City's Memorial Library, located at 901 Conover. Conover intersects Carrier, one stoplight south of Jefferson Street and the library is right next to the Police Station. The meeting is scheduled from 11:30 a.m. until 1:30 p.m. and will include a barbeque lunch.

If you or your staff is interested in attending this meeting, please contact Sharon Doyle at 972-237-8224.



City Water Restrictions

The City of Grand Prairie is at Stage 2 water restrictions. For businesses and homeowners alike, this means:

- No outdoor watering 10 a.m. - 6:00 p.m.
- No watering on Wed., Sat., and Sun.
- Odd numbered addresses water on Tues. and Fri.
- Even numbered addresses water on Mon. and Thurs.

Free Electronic Waste Recycling ...It is coming!

On June 28th, Dell Computers announced that it would be the first manufacture to recycle any of its consumer products free of charge whether or not the consumer buys a new Dell product. The new service is expected to be launched in the U.S. by September and world wide by November.

Congratulations to our Grand Prairie Industries that have achieved 100% compliance with pretreatment regulations during the 2005-2006 year!

ABC Compounding
Advanced Rubber Molding
Composite Technology
AJ Daw Ink
Heritage Aviation
Keystone Circuit Board
Lockheed Martin – LOSAT
Metal Improvement
Pharmafab
Poly America
Rheaco, Inc.
Siemens Energy & Automation
Smurfit Stone Container
Solvay Engineered Polymers
Strayer-Voigt
Sun Chemical
Turbomeca/Microturbo
Valspar Coatings
Wikoff Color Corp.
Weyerhaeuser Box Plant

Texas Wind Power

Texas is now #1 in the country for wind-power capacity, a title previously held by California. Texas now has 2,370 megawatts of capacity, enough to power more than 600,000 homes. Total U.S. wind power capacity is now at 9,971 megawatts, with 822 of that megawatt capacity added this year.

Thank you to our industries that attended all of the Environmental Compliance Workshops this year!

American Animal Health
Bell Helicopter
Harris Manufacturing
Lockheed Martin
Pratt & Whitney
Rheaco, Inc.
Smurfit Stone Container
Solvay Engineered Polymers



EPA Rewarding P2 Efforts

The EPA's National Partnership for Environmental Priorities (NPEP) is seeking to recognize programs that change their operations to diminish the use or release of 31 priority chemicals. Chemicals included on this list can be found at

www.epa.gov/epaoswer/hazwaste/minimize/partnership.htm. The

NPEP hopes to increase P2 activities voluntarily by recognizing those programs by giving out plaques, giving access to web based information and links to technical training assistance, and sending them the NPEP bulletin.



Climate Change....Myth or Science?

Signs of climate change have been around since the late 1950s, when scientists were first able to measure atmospheric CO² concentrations. We knew then that CO² levels were on the increase and that there was a pretty good chance that fossil fuels and deforestation were the causes. So why all the speculation now? The Al Gore movie, the ice cap meltdown, early flowering of plants, the early arrival of birds, weather pattern changes....the possibilities are endless. Despite the other factors influencing climate change such as volcanoes, solar radiation, and ocean circulation, it appears that we are ready to at least discuss human impact and consider the possibility that we are to blame.

Examining the evidence.

Reconstruction of temperatures over the past hundred years indicate that temperatures in the late twentieth and early twenty-first centuries are the highest in the last millennium – 2005 was

the second warmest year globally. There are no real studies that show that natural forces like changes in the earth's orbit, cooling following volcanoes, or sunspots can account for the changes. The Arctic has warmed 50% faster than the rest of the northern hemisphere and glaciers are retreating.

Can we slow it down? Scientists think that despite our actions now, temperatures will continue to rise because it takes decades for the climate to catch up with the increases in greenhouse gas concentrations and that greenhouse gases will continue to rise in this century.

How hot will it get? Scientists have a dozen models, but estimates range from 2.7 to 8.1 degrees depending on climate sensitivity or how much the earth's atmosphere could warm, given a certain level of greenhouse gas concentration.



Texas Trouble

A furniture manufacturing plant in Dallas County was assessed \$2,100 for failing to obtain air authorization for its spray painting operation and creating a nuisance due to excessive paint odors leaving the property.

A lime manufacturer in Johnson County was assessed \$60,625 for failing to control fugitive dust

emission, failing to have all material handling and storage enclosed or vented to the baghouse, failing to meet permit opacity limits, and other violations.

A plating shop in Tarrant County was assessed \$35,567 for waste violations including: failing to conduct hazardous waste determinations on all waste streams, failing to update their notice of registration, failing to prevent an unauthorized discharge of industrial solid waste, failing to meet secondary containment requirements for each tank, and failing to clearly mark the words "hazardous waste" to identify the contents on each tank accumulating wastes.

A wood recycler in Dallas County was assessed \$1,500 for failing to prevent wood dust from pallet grinding operations from migrating onto adjacent property and creating a nuisance situation.

A concrete batch plant in Tarrant County was assessed \$2,400 for failing to obtain authorization to discharge storm water associated with an industrial activity and for failing to prevent the unauthorized discharge of wastewater containing concrete waste material.

A aircraft engine building plant in Tarrant County was assessed \$3,840 for failing to keep the cover on the vapor degreaser closed at all times and by exceeding the maximum annual

usage rates of aluminum and polyester resin.

A chemical plant in Harris County was assessed \$7,600 for failing to maintain records of visible emissions and record monthly inspections of the cold solvent degreaser and failing to submit the semiannual deviation report on time.

A semiconductor manufacturer in Fort Bend County was assessed \$19,040 for failing to comply with effluent limits for chemical oxygen demand, oil and grease, and pH.

A construction company in Walker County was assessed \$840 for failing to maintain sediment controls and by failing to pay the general permits storm water fee and associated late fees.



P2 & Water Conservation

Benjamin Franklin once wrote, "When the well's dry, we know the worth of water." The well is not dry yet, but with little rain in the forecast...

Businesses can reduce their water use and lower their utility costs by adopting conservation practices and replacing inefficient equipment or operations. Below are some quick opportunities for commercial, industrial, and institutional customers to reduce water use with little or no up-front costs or impacts on performance and customer satisfaction.

- Check for leaks and emphasize leak reporting and repair.
- Use a broom, instead of a hose, to routinely clean sidewalks and driveways, and consider alternatives to discretionary uses of water that are not related to health and safety.
- Turn off water-using equipment when not in use, including dishwashers, garbage disposals, and food troughs.
- Replace inefficient equipment such as toilets, single-pass cooling systems, water-cooled ice machines, laundry systems, medical equipment, process water and many other systems. Most completed projects have financial paybacks of two years or less and often produce companion energy savings.
- Work with all employees to develop methods and procedures that will reduce water use. Evaluate how employees are using water and determine, with their help, more efficient alternatives.
- Eliminate daytime landscape watering. Water at night and consider weather-based or moisture sensing controls.

Eliminate Single-Pass Cooling

Single-pass cooling systems remove heat by transferring it to a supply of clean water and dumping it down the drain. With no recirculation, this is an extremely inefficient use of water, resulting in unnecessarily high water and sewer costs. Examples of cooling equipment that might have single-pass cooling include air conditioners, refrigerators, coolers, and ice machines. Facilities often opt for single-pass systems because they are relatively inexpensive to install. These savings are short-lived. Single-pass systems are significantly more expensive to operate, resulting in high water and sewer bills.

Cost-effective options for replacing existing single pass systems include:

- Packaged air-cooled equipment - install stand-alone air-cooled ice machines and coolers.
- Closed-loop piping – recirculate cooling water to a remote air-cooled chiller or cooling tower, or connect to an existing closed-loop system serving another area of the building.
- Split-system - use heat pumps with remote air-cooled condensers.

Improve Control of Cooling Tower Water

Efficient control of cooling tower water provides quick opportunities for office buildings, manufacturing plants, schools, universities, and hospitals to save money and avoid costly repairs. Poorly controlled water quality can result in undue expenses in the form of equipment failure and high chemical, labor, and water costs

Cost-effective solutions include

- Installing automatic controls. Controllers that automatically monitor the concentration of dissolved solids and pH and then bleed water or add chemicals as appropriate can contribute to savings in chemical and water usage, reduce the labor requirements associated with manual control and cleaning, and help avoid premature equipment failure.
- Tracking water usage. Install sub-meters for both makeup and blow down water and log usage regularly. If usage becomes excessive, check operation of blow down controller and makeup (float) valve.
- Regularly test water quality and log results. Use a hand-held conductivity meter to track conductivity of

sump water and log at least monthly. You may also wish to track pH.

- Set targets. Work with a reputable water treatment provider to identify your particular requirements and to maximize water efficiency. Set target conductivity levels and obtain a commitment from your service provider to help maintain those levels.
- Consider using side stream filtration or ozonation. For larger cooling towers, side stream filtration or ozonation of sump water can lower the requirements for chemical treatment and may reduce the necessary rate of “blow down.”
- Improve energy efficiency in your operations. Energy efficiency changes generally decrease the load on your cooling tower and will reduce water lost through evaporation.



New Algae Emergence

Reading environmental news is like watching the evening news, a lot of bad news and not much good news. In Texas, scientist

are watching newly emerging algae – golden algae- which is showing up in Texas lakes and rivers and wiping out millions of fish. First identified in the Pecos River in 1985, it has surfaced in some of the state’s major river basins. So far it has caused fish kills in five (5) of the state’s 25 major river basins. The Texas Department of Parks and Wildlife reports that the toxins from the algae have killed more than 25 million fish worth \$10 million dollars. This golden algae is harmful when it outcompetes other aquatic algae and blooms. The blooming releases toxins that affect gill-breathing animals like fish and clams. The toxins present prevent exposed cells from keeping out excess water and waterborne chemicals causing bleeding and lesions on the gills. Research is underway to determine the most cost effective treatment options.





City of Grand Prairie
Environmental Services Department

Environmental Compliance Workshop

Registration Form

September 20, 2006
11:30 a.m. – 1:30 p.m.
P2 & Pretreatment Awards

Grand Prairie Memorial Library
901 Conover

Company Name: _____

Address: _____

Telephone: _____

Attendees: _____

PLEASE RETURN BY MAIL TO ENVIRONMENTAL SERVICES DEPARTMENT,
P.O. BOX 534045,
GRAND PRAIRIE, TEXAS, 75053-4045 OR BY FAX TO 972-237-8228.