

ENVIRONMENTAL COMMISSION MEETING
September 6, 2012 6 PM
7700 Southern Avenue (Public Services Building)

MINUTES

Present

Chairman Joe Skelley
Jimmy Davis
Urania Erskine
Steve Fleischmann
Andy Foster

Linda Kaplan
Paul Mosteller
David Thorpe
Susan Threlkeld
Alderman Mike Palazzola

Staff

Bo Mills
Joe Nunes
Leslie Throneberry

Absent: Clyde Davidson

CALL TO ORDER:

Chairman Skelley called the meeting to order at 6:00 p.m.

MINUTES APPROVAL:

The minutes of the August meeting were approved.

STAFF REPORTS:

Joe Nunes: Recycling and household waste volume reports were passed around (see Attachments A & B, respectively). The recycling is up from last month and up from the same month last year; however, still down year-to-date. Household waste volume is down.

Amnesty Day is set for Saturday, September 15, 2012. There was a miscommunication of the dates with the City's "FYI" publication, which has it listed as September 22, 2012. The City is advertising the correct date to the citizens via "Talk of the Town", the City's website, GHS-TV and other forms of media. Mr. Nunes and Mr. Mills will try to get approval from Administration to have a scaled down version on the 22nd for anyone who didn't get the corrected information.

Bo Mills: Mr. Mills invited the Commission members to the Ribbon Cutting ceremony for the Greenway on Friday, September 28, 2012 at 11:00 a.m. When the official invitations are available, Leslie will send them out. A small section of the Greenway where the gas transmission lines cross Wolf River Boulevard is closed for repairs to the riverbank at the gas line crossing. It will remain closed for a couple of weeks. Repairs will be completed before the Ribbon Cutting ceremony.

The Germantown Festival and Weenie Race are this weekend. Commemorative t-shirts are available to purchase.

Germantown has a new residential development called the Elysium. It is located on the north side of Poplar across from Ashmont Drive. It has 38 lots with 3 estate lots. It is a high-end, gated community. Homes are estimated to be around \$800,000. The development will have 8.26 acres of green space. There is a natural channel going through the property that will remain as is. There will be a couple of crossings built over it.

COMMITTEE REPORTS:

Paul Mosteller: Mr. Mosteller has researched ideas for Water Conservation. Examples are water bans, rain barrels, etc. It was asked if anyone had any other ideas. Alderman Palazzola suggested the possibility of using some of the funds from the Storm Water Management program to educate the citizens of the City. The City is in the process of including a water conservation letter with our backflow preventer paperwork for irrigation lines. The September issue of "Talk of the Town" (Attachment C) included information on water conservation.. Mr. Nunes suggested handing out information at Amnesty Day. Mr. Mills and Mr. Tim Bierdz have requested the City to put money in the budget to purchase some rain barrels. Bobby Lanier Farm Park will have rain barrels.

Urania Erskine: Mrs. Erskine asked if the public schools pay for recycling. Mr. Nunes informed her that our vendor does not pick up any non-residential/commercial trash or recycling other than for the City facilities. Mrs. Erskine also asked how long the dumpster will remain in front of our Economic and Community Development office. Mr. Nunes informed us that the dumpster is for cardboard recycling only. The 35-gallon residential recycling carts are not big enough to handle cardboard.

The Grand Opening for the Bobby Lanier Farm Park is this Saturday and Sunday, September 8 and 9, 2012. Mr. Mills handed out flyers (Attachment D) showing the schedule of events.

Approximately 60% of the nation is suffering from the drought per the "Wall Street Journal" article (Attachment E). The water tables are dropping for some aquifers. Mr. Mills will get a report for our aquifer later this month. Mrs. Erskine reported that certain counties in California are recycling the sewage to get some water out of it.

Mrs. Erskine questioned the number of days in our billing periods for her water bill. It was explained that because of the 5-week months, holidays and inclement weather, the billing periods are varied. We bill each account once per month.

Mrs. Erskine complimented the City for fiscal responsibility in cutting back on water use.

Susan Threlkeld: Mrs. Threlkeld has been working with our Education program. She would like to know if anyone else would like to take the lead responsibility for this program; however, she will continue to participate. Mrs. Threlkeld will ask Brandy Miller for her connection list at the schools. Mr. Mills volunteered to assist with putting together a distribution list.

Linda Kaplan: Corporations want to recover and recycle their used packaging. An example of this is Coca-Cola. They are finding that it is less expensive to recycle than to make new plastic. Also, the South African bottling plant is LEED certified.

Earth Policy Institute reports that the world forest area is still on the decline. The forests provide many important goods like timber and paper. They also supply essential services like filtering water, control water run-off, protect soil, regulate climate, cycle and store nutrients and provide habitat for countless animals. Forests cover 31% of the world's land surface.

Plug-In Day is coming to Tennessee on Sunday, September 23, 2012. This year more than 50 cities have confirmed to participate. September 19, 2012 is date for the ribbon cutting ceremony at Shelby Farms for the solar powered plug-ins for the electric vehicles. The City of Germantown is still working out details with our electrical contractor to get the electricity to the chosen locations for our EV power stations.

Alderman Palazzola: The Commission appreciation dinner has been moved to November 27th. Details will be forwarded.

Alderman Palazzola wanted to extend his thanks to the members that have been active in the Bobby Lanier Farm Park. Additional funding for professional services to continue improvements will be budgeted at the next Board of Mayor and Aldermen meeting.

Alderman Palazzola met with John Zenow, Program Director for the Office of Sustainability for Memphis & Shelby County. It was agreed that the commission would like to have Mr. Zenow speak at one of the Environmental Commission meetings.

Andy Foster: North Carolina State University in Raleigh, NC may have found a way to enhance solar absorption using sandwiched nanostructures. They will be cheaper to manufacture and have greater efficiency.

The new building that is under construction at Fed Ex will have twelve plug-ins for electric vehicles.

David Thorpe: We continue to have Code Orange Ozone days. The new ozone standard has been lowered, therefore increasing the number of days. This is not an indication that our air quality has worsened.

The U.S. Court of Appeals for the District of Columbia has rejected the EPA's Cross-State Air Pollution Rule as improper and illegal. According to the Texas Attorney General News Release dated August 21, 2012, "The court explained that the EPA ignored – and violated – the federal Clean Air Act by imposing regulations not authorized by federal law." (Attachment F)

Jimmy Davis: The approach to the water situation in California is different than it is in this area. Some Californians are actually happy that we have been having droughts here so that we could become more conscious about water. There are actually flush-less urinals in California. Mrs. Erskine said that the fire department also has a flush-less urinal in one of the emergency vehicles.

Dr. Davis saw a survey recently that stated that more people are beginning to believe in global warming because of the very warm weather we are having. Warm winters create the opposite effect.

Joe Skelley: West Nile Virus seems to be coming back. The Jackson Sun newspaper reported that there are two cases in their area. Dr. Davis commented that the West Nile Virus symptoms can be flu-like and on occasion there can be no symptoms at all. Mr. Foster stated that he read an article that said the virus could have a 10-year incubation period. Mr. Fleischmann said that three people in Shelby County have West Nile Virus and that mosquitoes carrying the virus have been found in every zip code. Mrs. Erskine suggested promoting bat houses. Mr. Thorpe stated that the Shelby County Health Department gives away larvae eating fish. Mr. Foster is going

to get more information about a company in Memphis that will spray your yard with chrysanthemum scent, which mosquitoes do not like. The scent will keep mosquitoes out of your yard without killing any of your plants or grass.

Steve Fleischmann: Mr. Fleischmann questioned Mr. Nunes as to which plastics the City currently recycles. We currently recycle #1 and #2 plastics only. A local recycling vendor is refitting their processing facility to accept all plastics. Our vendor will also move in the same direction to keep up with the competition. By next year, we should be able to process all plastics (1 through 7). Mr. Nunes will have more information at the next meeting.

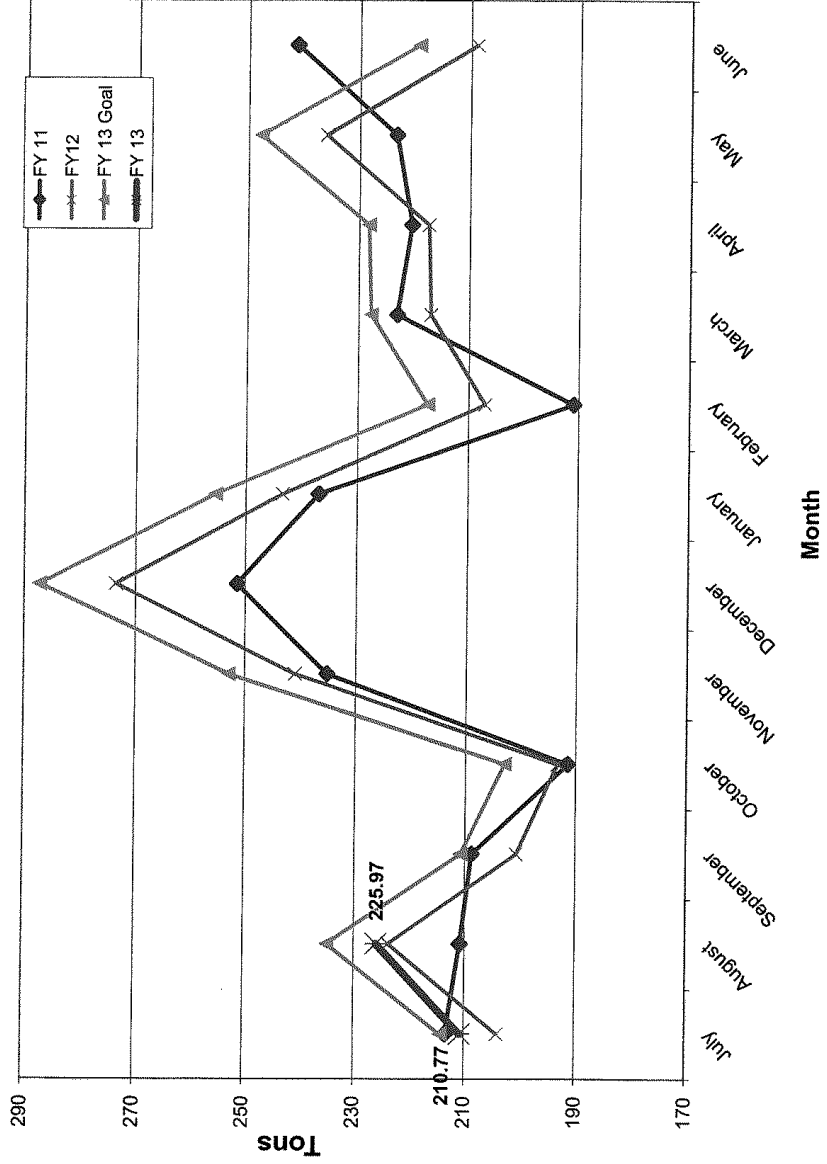
NEW BUSINESS: Mr. Foster questioned the ability to recycle pizza boxes. Mr. Nunes will check on this.

Sign-up sheets for Amnesty Dumpster Day, Mulch Day and Senior Expo were distributed. (See Attachments G, H and I, respectively).

ADJOURNMENT:

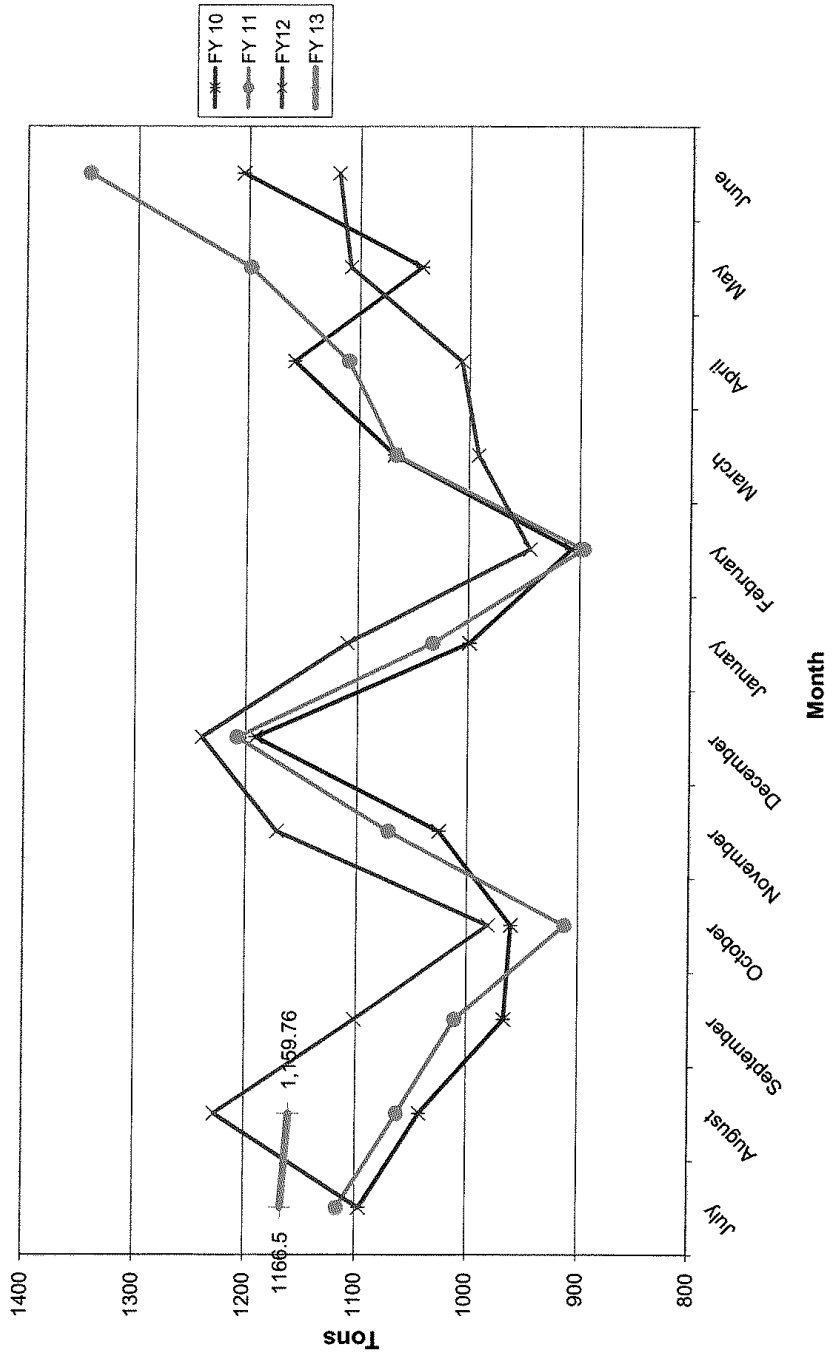
The Commission adjourned at 7:13 p.m.

FY 11 - FY 13 Recycle Volume Comparison



Attachment B

FY 10 - FY 13 Monthly Household Trash Volume Comparison





September 2012

Attachment C

Talk of the Town

Be an Informed Voter

Hear from school board and alderman candidates before you vote November 6. The Leadership Germantown Alumni Association will host a community forum of candidates for the five positions on the new Germantown Municipal School Board on Monday, October 1, starting at 6 p.m., in Municipal Center Council Chambers. Candidates for the three Board of Mayor and Aldermen positions will participate in a forum on October 16 in Municipal Center Council Chambers at 6 p.m. Both events will be televised on GHS TV, Comcast channel 17. Video of the events will be archived online at germantown-tn.gov/video. The public is invited to submit questions to be presented to the candidates to [Russell Johnson at rjohnson7610799@msn.com](mailto:Russell.Johnson@rjohnson7610799@msn.com).

Take a "Night Out" to Fight Crime

Homeowners across Germantown will be turning on their front porch lights, locking their doors and stepping outside to get together with neighbors on "Night Out", Tuesday, October 2, beginning at 5 p.m. The annual event is promoted by the City of Germantown in observation of Crime Prevention Month.

Some neighborhood associations organize large gatherings. However, participation can be as simple as inviting nearby homeowners for conversation and light refreshments on a front porch, backyard or driveway. To invite Eddie Eagle, McGruff the Crime Dog, Olffe the Otter, Germantown police officers, aldermen and city officials to stop by, contact Sherrye Rhea at 757-7203 or srhea@germantown-tn.gov.

Free Mulch Available to Homeowners

Wood debris from Germantown yards has been broken down into mulch and will be given to residents Saturday, October 20, beginning at 8 a.m. at the public services complex, 7725 Southern Avenue. To receive 1.5 cubic yards of aged, double-hammered mulch free, bring proof of Germantown residency. Public services employees will load mulch into the back of a truck or trailer. Smaller amounts will be available in a "load your own" zone for those who bring their own bags. There is a limit of one load of mulch per household. For more information, contact neighborhood services at 757-7263.

Race for Cure Returns October 27

The 20th annual Susan G. Komen Memphis-MidSouth Race for the Cure® will bring thousands of runners and walkers to city streets Saturday morning, October 27. The 5K run and one-mile family walk will launch at 8 a.m. from a new start line on Germantown Road between Cordova and Neshoba roads. The route has been slightly changed.

Germantown police will close area streets early that morning. Residents along the race course are asked to schedule their errands after the race concludes. For more information or to volunteer, call 757-8686 or e-mail info@komenmemphis.org. In the event of inclement weather, please call 751-KNOW (5669) for event status.

Prevent Sewer Backups

Help prevent sewer line blockages by not flushing or pouring items not intended for the sewer system down the drain. For example, cooking grease poured down the kitchen sink may collect in the line and solidify into a blockage at any time.

If sewage backs up into your home, immediately stop all water usage (toilets, dishwashers, etc.). Quickly remove the clean-out cap—usually in a flower bed or lawn—on the outside service line. Another immediate remedy is to close all drain openings with a stopper or plug.

Call the City at 757-7350 to have the lines checked and determine the problem. After hours, call 757-7339. The City suggests sewer backup coverage as part of a homeowner's insurance policy. Some policies automatically include it; in other instances, policy holders must request coverage. Check with your insurer. For more information, contact Michael Stoll, city risk manager, at mstoll@germantown-tn.gov or 757-7222.

Conserve Water Consumption

The average urban household uses about 100 gallons of water per person per day. To use water more efficiently, try the following suggestions:

- Install faucets aerators to reduce flow rate by 50%.
- Fix leaking faucets which can waste 350 gallons of water per month.
- Run the dishwasher only when full, it uses approximately 20 gallons per load.
- Adjust the water level on washing machines, it uses 14% of all household water.
- Take showers instead of baths and limit shower time.
- Turn water off when brushing your teeth.

Attachment 1D



Grand Opening Event!

Saturday, September 8, Noon to 7 p.m.

Sunday, September 9, Noon to 4 p.m.



Saturday:

- Walk the storybook trail from the festival to the Farm Park
- Main Stage Events
 - Tony Geraci, Memphis City Schools Director of Food Services
 - Local authors - Deanna Caswell & Daisy Siskins, Little House in the Suburbs: Backyard Farming and Home Skills for Self-Sufficient Living with a book signing to follow
 - Music by Bluegrass Conspiracy
 - Cooking demonstrations
 - Garden talks
- Local artisan demonstrations
- Bluegrass pickers
- Children's activities in The Big Oak Tree Activity Center

Sunday:

- Old fashioned, farm style picnic with family friendly games and activities. Bring your own or purchase a box.
- Feature music by local church choirs
- Horseshoe tournament
- Homemade ice cream

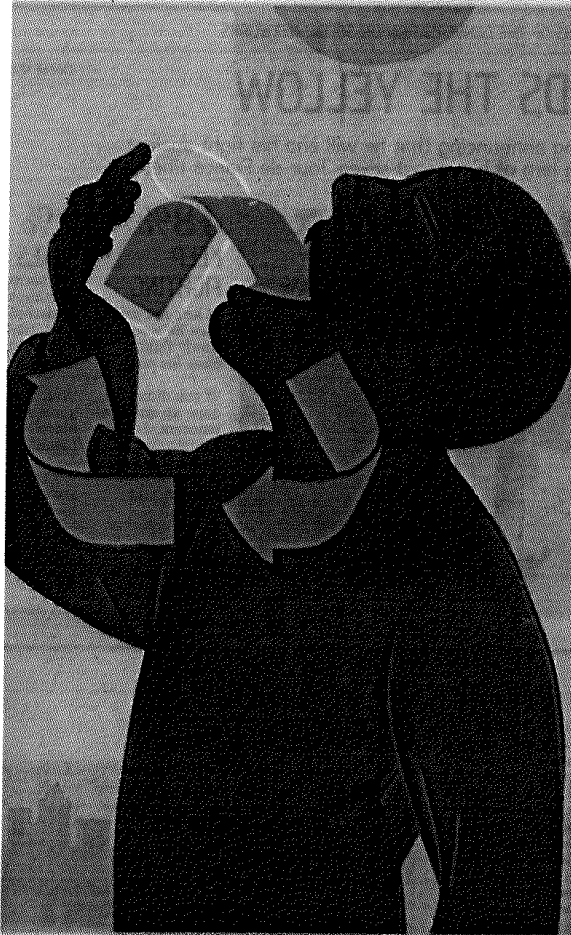
To reserve a spot for your church choir on Sunday, please contact:

Michelle Johns, 901.336.2874 (phone),
mjohns@germantown-tn.gov (e-mail)

Mikki Barton, 902.757.7375 (phone)

REVIEW

Attachment E



You Are Drinking What?

With water in short supply across the country, it's time to take a serious look at recycling sewage

BY PAUL KIX

ALMOST 60% of the continental U.S. is now living through drought conditions, and half of all counties have been declared disaster areas. From coast to coast, cities and towns are placing restrictions on water consumption. With the nation so hot and dry and no end in sight, some are calling for a drastic solution: drinking our own wastewater—that is, what we usually flush down our toilets.

Not directly, of course. But drinking recycled wastewater is a relatively cheap and effective means of obtaining a lot of water. If all the wastewater dumped into waterways or the ocean were recycled instead, the U.S. would increase its water supply by as much as 27%, according to a report released earlier this year by the National Academy of Sciences. Nationally, that amounts to 12 billion gallons.

The process for recycling wastewater is more rigorous than for “regular” tap water, with stronger filtration. As the NAS report noted, “With recent advances in technology and treatment design, potable reuse can reduce the concentration of chemical and microbial contaminants to levels comparable to or lower than those present in many drinking water supplies.”

The U.S. could increase its water supply 27% if it recycled all the wastewater dumped into waterways

Recycled wastewater is also cheaper than other alternatives. Desalination—turning seawater into drinking water—sounds more palatable, but estimated costs can run one-half to two-thirds more than for a recycled wastewater facility. That is largely due to the amount of filtration required. Wastewater has roughly 1,000 parts per million of salt, but seawater has roughly 35,000 parts per million. Desalination is also, of course, limited to states near seawater.

But the idea of recycled wastewater still disturbs many people, which is why it hasn't caught on. Wade Miller, executive director of the Water ReUse Association, a national advocacy group, estimates that only 7% of municipalities across the country recycle wastewater—and that figure liberally interprets reuse, including water for agriculture and golf courses. Only a handful of communities actually drink recycled wastewater, Mr. Miller says, including El Paso, parts of Los Angeles County, and Orange County, Calif.

Where the programs exist, they are born out of desperation—which is precisely how the idea got its start.

It began in the tiny capsule of the Mercury rocket, on May 5, 1961, with Alan Shepard looking out his periscope viewer at the morning clouds. It was 15 minutes before his launch, before he was to become the first American sent into space, and he was nervous, according to “Moon Shot,” the book that he later co-wrote. The launch director came on and told Mr. Shepard that there was an electrical glitch; the flight

would have to wait.

Another problem emerged during the nearly 90-minute delay. “Man, I got to pee,” Mr. Shepard told astronaut Gordon Cooper, who was in ground control. The flight was only supposed to last 15 minutes, and the rocket wasn't equipped with a toilet. Mr. Shepard was told to hold it.

“Gordo, I've got to relieve myself,” Mr. Shepard said, getting angrier. “Tell 'em I'm going to let it go in my suit.” But Mr. Shepard had electronic biosensors up and down his legs. Mr. Cooper said, “The medics say you'll short-circuit all their medical leads.”

“Tell 'em to turn the power off,” Mr. Shepard said.

And so the medical team did. A short while later, Mr. Shepard was launched into his suborbital flight, a brave, relieved man.

As space flights became longer, the problem of discarding waste persisted. Neil Armstrong walked the moon in diapers. It wasn't until the era of the International Space Station, with astronauts on six-month missions, that NASA engineers began to think creatively about waste. “We didn't think that we could resupply [the astronauts] with water up there,” says Monsi Roman, a microbiologist at the Marshall Space Station, who has worked at NASA for 25 years. “And that's when we began to think about recycling urine for drinking purposes.”

Urine consists of salt, water and contaminants, and on the space station today, the salt and contaminants are distilled and thrown away. The remaining water goes into a processor that burrs away any lingering bacteria, and then iodine further cleans it. “It's a closed loop,” Mr. Roman says—and an inspiration for wastewater treatment plants back on Earth.

Orange County's Groundwater Replenishment System, which opened in 2008, produces over 70,000 gallons of water every day. It is modeled to a degree on NASA's space station breakthrough. The wastewater goes through a micro-filtration process and then reverse osmosis (in which chemicals, viruses and pharmaceuticals are removed) before being exposed to high-intensity ultraviolet light to destroy any lingering compounds. Over two-thirds of the county has been served by the recycled water system since it went online four years ago, says Michael Markus, the general manager of the Orange County Water District.

But it was a long time in coming. Mr. Markus and other water-district employees knew in the early 1990s that the county would soon face a water shortage—and they knew, too, that recycling wastewater would be as much a political challenge as an engineering one. So they hired consultants, polled the public and discovered common concerns. The water officials went to the 19 affected municipalities and gave presentations to their city councils. They then moved on to state and federal officials. Some 1,200 presentations and tours later, the recycled water began to flow from taps. “It tastes like distilled water,” Mr. Markus says. “There's actually very little taste to it.”

He believes that every municipality should follow Orange County's example. Because, he says, “you're wasting sewer water if you're not using it.”

Mr. Kix is an editor at ESPN the Magazine and writes about science for the Boston Globe.

FOR IMMEDIATE RELEASE
August 21, 2012
www.texasattorneygeneral.gov

CONTACT Attachment F
Press Office at
(512) 463-2050

**Texas Scores Another Victory Against Overreaching EPA, Court
Overturns Agency's Illegal Cross-State Air Pollution Rule**

AUSTIN — Texas Attorney General Greg Abbott issued the following statement following today's ruling from the U.S. Court of the Appeals for the District of Columbia Circuit rejecting the Environmental Protection Agency's improper and illegal Cross-State Air Pollution Rule (CSAPR):

"Yet another federal court has reined in an overreaching EPA for violating federal law and intruding on Texas sovereignty. Texas challenged the Obama Administration's burdensome and unlawful regulations because they jeopardized electric reliability in the state, threatened job losses for hard-working Texans, and exceeded the limits of the EPA's authority. Vindicating the State's objections to EPA's aggressive and lawless approach, today's decision is an important victory for federalism and a rebuke to a federal bureaucracy run amok."

In a 60-page opinion issued this morning, the court rebuked the EPA for exceeding its statutory authority when it issued the CSAPR regulations. The court explained that the EPA ignored – and violated – the federal Clean Air Act by imposing regulations not authorized by federal law. The court also roundly criticized the EPA for ignoring the cooperative federalism approach required by the Clean Air Act. Under this system, the federal government identifies pollutants and establishes the national air quality standards – but states retain the authority and flexibility to enact their own unique state-based programs that ensure those standards are satisfied. In its opinion, the court also condemned the EPA for immediately seizing control of states' permitting programs before states were properly given an opportunity to comply with the EPA's new emissions limits.

As the CSAPR regulations were specifically applied to Texas, the EPA's overreach was especially onerous. First, the EPA failed to provide Texas the advance notice that is required by federal law when it did not include the State in key aspects of the proposed rule that was published in August 2010 – but then added Texas to the final regulations without notice. Further, Texas' last-minute inclusion in the EPA's CSAPR regulations was based upon a single air quality monitor in Granite City, Illinois – which was fundamentally flawed not only because a nearby steel mill necessarily impacted that location's air quality, but because that very location actually satisfied federal air quality standards.

Excerpts from the Court's opinion:

"...Congress did not authorize EPA to simply adopt limits on emissions as EPA deemed reasonable. Rather, Congress set up a federalism-based system of air pollution control. Under this cooperative federalism approach, both the Federal Government and the States play significant roles."

"Our limited but important role is to independently ensure that the agency stays within the boundaries Congress has set. EPA did not do so here."

"The Transport Rule includes or excludes an upwind State based on the amount of that upwind State's significant contribution to a nonattainment area in a downwind State. That much is fine. But under the Rule, a State then may be required to reduce its emissions by an amount greater than the 'significant contribution' that brought it into the program in the first place. That much is not fine."

"There is a second, entirely independent problem with the Transport Rule. EPA did not stop at simply quantifying each upwind State's good neighbor obligations. Instead, in an unprecedented application of the good neighbor provision, EPA also simultaneously issued Federal Implementation Plans, or FIPs, to implement those obligations on sources in the States. EPA did so without giving the States an initial opportunity to implement the obligations themselves through their State Implementation Plans, or SIPs."

"EPA's approach punishes the States for failing to meet a standard that EPA had not yet announced and the States did not yet know."

"EPA faults the States for not hitting that impossible-to-know target with their SIP submissions. In effect, EPA's view is that the only chance States have to hit the target is before EPA defines the target. By the time EPA makes the target clear, it's already too late for the States to comply."

FOR OTHER ITEMS ASSOCIATED WITH ATTORNEY GENERAL ANNOUNCEMENTS, ACCESS OAG NEWS
RELEASES ONLINE AT WWW.TEXASATTORNEYGENERAL.GOV.

POST OFFICE BOX 12548, AUSTIN, TEXAS 78711-2548 TEL:(512) 463-2100 WEB: WWW.TEXASATTORNEYGENERAL.GOV

AMNESTY DUMPSTER DAY

September 15, 2012
7:30 AM - 1 PM

LOCATIONS: 1) PUBLIC WORKS 2) JOHNSON ROAD PARK

Environmental Commission Sign-up Roster

PUBLIC WORKS ON SOUTHERN	
Clyde Davidson	
Walt Matulis	
Jimmy Davis	
Susan Threlkeld	
Kenda Kaplan	
Mike Palazzo	

JOHNSON ROAD PARK	
URANIA ERSKINE	
ANDY FOSTER	
Joe Kelley	
STEVE FLEISCHMANN	
David Thorpe	

RESERVES	

Attachment I

SENIOR EXPO
Booth #53

Athletic
Club

NOVEMBER 1, 2012

9:00 a.m. – 3:00 p.m.

ENVIRONMENTAL COMMISSION SIGN-UP SHEET

9:00

URANIA ERSKINE	

10:00

Clyde Davidson	

11:00

12:00

1:00

2:00

Gina Kaplan	