

# Environmental Commission Meeting

Thursday, August 4, 2016 – 6:00 p.m.

Public Works Building

7700 Southern Avenue

## MINUTES

### Present:

Chairman Joe Skelley

Jimmy Davis

Urania Erskine

Steve Fleischmann

Andy Foster

Alderman Rocky Janda

Paul Mosteller

Scott Schoefernacker

Susan Threlkeld

Jayu Wagh

Absent: Linda Kaplan and Bo Mills

### CALL TO ORDER:

Chairman Skelley called the meeting to order at 6:03 p.m.

### ESTABLISHMENT OF QUORUM:

A quorum for the Environmental Commission meeting was established.

### CONSIDERATION OF MINUTES:

The minutes of the July meeting were approved.

### STAFF REPORTS:

Joe Nunes: Joe shared that recycling volumes are up in June reflecting Inland's poor collection. Trash volume was also up in June. It could be a residual effect from Inland not picking up the first week of June. July's volume numbers aren't available yet. (See attachments #1 & #2)

Comparing complaints from July 2016, after Waste Pro has been on the job for 2 months, to complaints in July 2015, after Inland had been on the job 9 months: trash complaints are down 54% compared to last year, 81% on yard debris complaints, and 12% on recycling; Overall a 56% decline on complaints.

A meeting will be held with Waste Pro next week. August is the last month of the "Start Up" grace period. The City will assess damages if they don't comply with the terms of the contract and will review those with Waste Pro. We are confident they will get everything together.

Alderman Janda interjects that he has gotten no complaints after Waste Pro has taken over.

Bo Mills: Bo absent; Attending APWA new board member orientation in Kansas City.

Kathy Cross: Kathy shared a thank you note from Leslie Acerra for the gift given by the Commission. Ms. Acerra also brought watermelon salad for the Commission to enjoy. Mrs. Cross passed out copies of the Germantown Forward 2030 Plan. Joe shared that the entire plan is available on the City's website. Kathy passed around the sign-up sheet for the upcoming Amnesty Day on September 17.

### COMMITTEE REPORTS:

Alderman Janda: No Report.

Andy Foster: Andy shared that the retention ponds at his office used for water run-off are also used to water their lawns. He stated that one town in Florida removed all the grass and replaced it with rocks to save water; which resulted in the town being hotter.

Scott Schoefemacker: Scott is still working with Tim Bierdz on Stormwater stickers and possibly getting funding to have art painted in Stormwater drains; Looking to do one street in English Meadows to start due to budget cuts. The idea is still in its infancy.

Paul Mosteller: Paul has a homework project for those members with in ground sprinkler systems: After ½ hour of watering, go out and look at how much water is running down into the gutter. There is a problem with wasting water because of overwatering with sprinkler systems. Come up with ideas to suggest to people to conserve water such as misting systems.

Paul shares that the arm on the recycling truck is damaging carts when picking them up. He suggests that Joe asks Waste Pro if the arm is programmed or is it automatic. Can they adjust how hard the truck squeezes the carts?

Urania Erskine: Urania brought an article from The Commercial Appeal concerning Girl Scouts developing a program for recycling. Girl Scouts might be a good venue to promote recycling to parents.  
(See attachment #3)

After our past discussions of how to recycle Styrofoam, Urania shares it has been found that Mill worms will eat Styrofoam. (See attachment #4)

Steve Fleischmann: Whole Foods' replaced Steve's old reusable bags with new recyclable bags made of plastic bottles. Whole Foods' gives a 10 cent credit per bag each time you use their reusable bags.

Steve reported on an article from The Memphis Flyer: TVA may drill wells into the Memphis Sands aquifer to cool the new Allen Combined Cycle gas plant. TVA was planning on using water from the Maxson Wastewater Treatment Plant but it would add over a billion dollars a year to the operating costs to treat the gray water. Their plan is to pull 3 ½ million gallons of water per day, but approximately 2 million would evaporate in the cooling process, so they are talking about potentially using aquifer water.  
(See attachment #5)

Jimmy Davis: Jimmy updated us on a "hot spot" in Miami where the Zika virus is probably being transmitted by mosquitoes. It has spread from that hot zone to a second location. He stated an article said the number of military and diplomats with Zika is in the thousands because they are exposed when they travel. "For now it appears that the body can get rid of it and hopefully it will stay that way."

Jayu Wagh: Jayu shared about turning carbon-dioxide into stored energy. Sounds like science fiction but in the city of Toronto the students & post-doctorate fellows have used nanoengineering in converting the carbon-dioxide (CO<sub>2</sub>) into carbon-monoxide (CO) which can be used in chemical fuels such as methanol, ethanol and diesel. The greenhouse effect gas can be used to manufacture the fuel using nanoengineering.

An engineer has discovered a way to take plastic trash and convert it into bricks. The plastic bricks are said to be good insulation. He is going to use his bricks along with mud to build the outside of a museum.

OLD BUSINESS:

No old business to share.

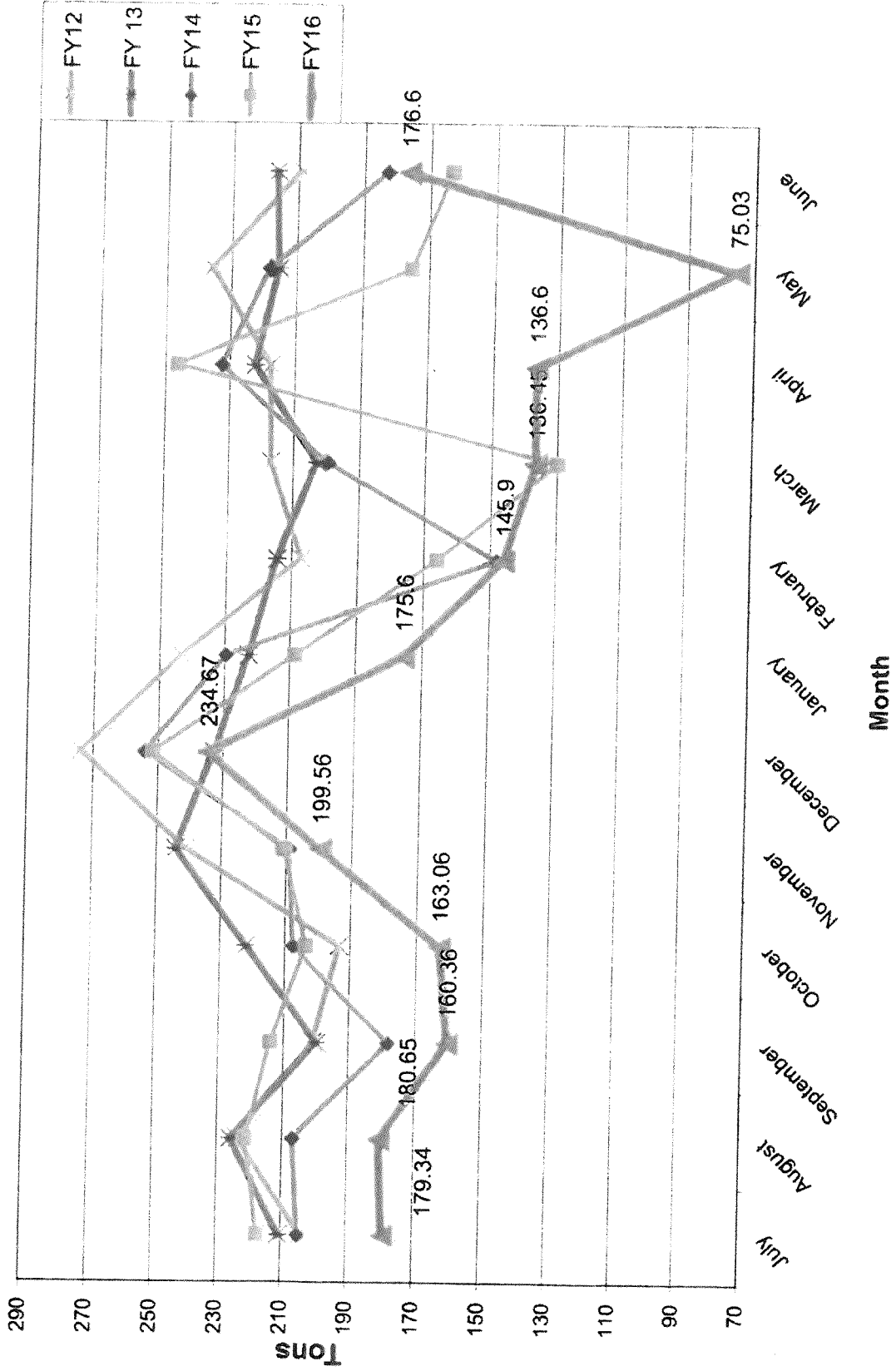
NEW BUSINESS:

Mark your calendar for September 17's Amnesty Day.

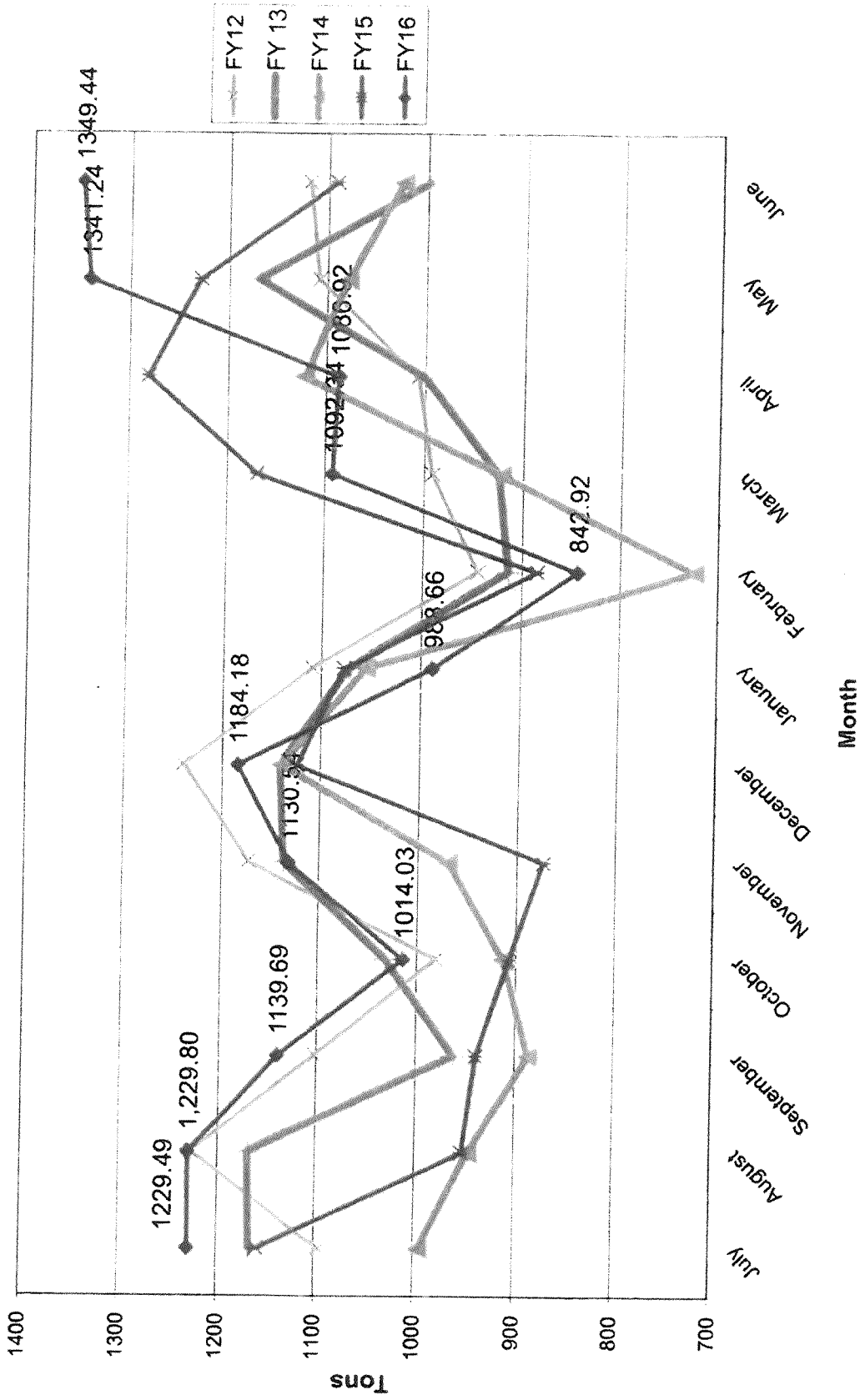
ADJOURNMENT:

There being no further business, the meeting was adjourned at 7:44 p.m.

### FY 12 - FY 16 Recycle Volume Comparison



FY 12 - FY 16 Monthly Household Trash Volume Comparison



NATION/WORLD

# Girl Scouts teach parents to save energy

By Karen Kaplan  
Tribune News Service

## ■ Clinical trial trains youth to help families

For decades, Girl Scouts have pledged to make the world a better place. Now there's scientific proof that they do.

After completing five hour-long courses on energy conservation, junior-level Girl Scouts boosted their households' energy-saving activities by as much as 49 percent, according to a study published Monday in the journal *Nature Energy*.

They didn't stop there. In one of the courses, the fourth- and fifth-grade girls also prompted their parents to increase their conservation behaviors by up to 12 percent.

The Girl Scouts' success in

this unique clinical trial demonstrates that children have the potential to serve as agents of change for their entire families, Hilary Boudet, an assistant professor at Oregon State University's School of Public Policy, and her colleagues concluded.

Americans could certainly use the help. According to the U.S. Energy Information Administration, U.S. households account for 21 percent of the world's energy use, despite making up about 4 percent of the world's population.

The energy-conservation course — Girls Learning Environment and Energy, or GLEE

— was developed at Stanford University. It encourages girls to save energy by having them practice skills, like making sure charging cords were plugged into power strips. Also, by rehearsing these skills with their fellow Girl Scouts, the girls reinforced one another's motivation to follow through with their new skills at home.

The GLEE team invited Girl Scout Junior troops from Santa Clara, San Mateo and Alameda counties to try the program. Fifteen troops were randomly assigned to a course focused on saving energy at home, and 15 were assigned to a different

course examining energy use related to food production and transportation. Altogether, 327 Girl Scouts and 303 of their parents tried one of the two programs.

In both cases, the Scouts created a fake newscast about energy conservation. As part of their newscast, the girls demonstrated and filmed examples of energy-saving behaviors. It took between eight and 12 weeks for most of the troops to complete the training.

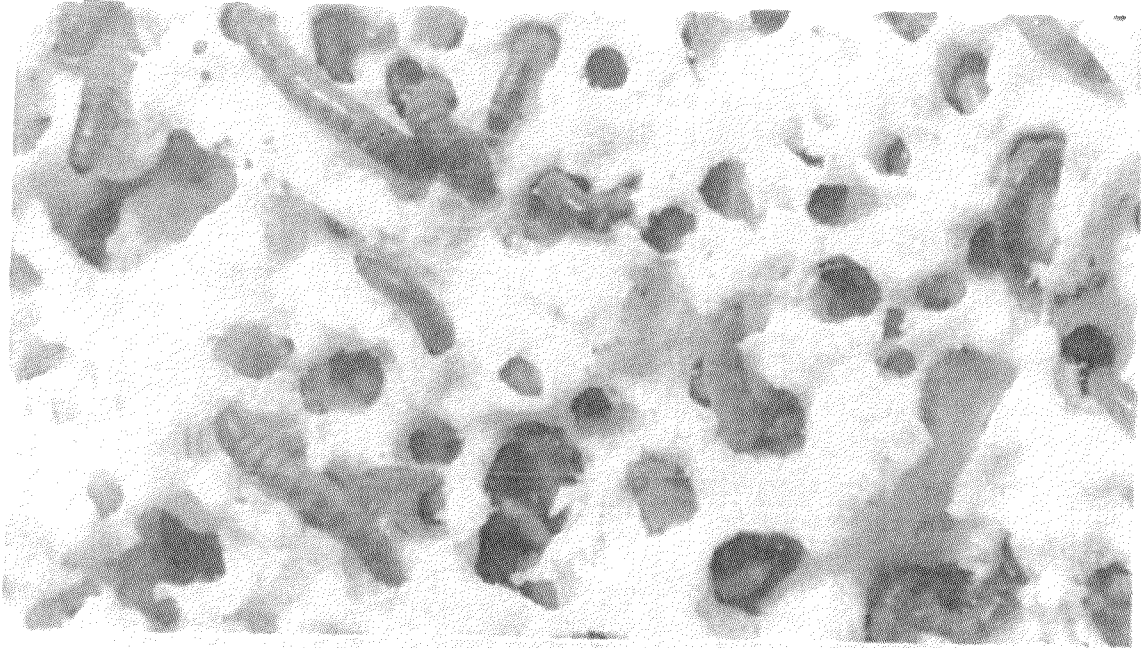
The course focused on energy conservation at home was the more effective of the two, survey data showed. By the time

the training sessions were over, the girls who had increased their residential energy-saving activities by 49 percent — a change the researchers were able to measure by using the girls in the food and transportation course as controls.

Eight months later, the girls who were trained in residential conservation techniques were still applying what they had learned — their energy-saving behaviors were up 27 percent compared to where they had been before the course began.

The biggest changes they made in their homes included turning off power strips at night, changing the temperature settings in their refrigerators and using cold water in the washing machine.

#4



# Water Works {

CITY REPORTER  
By Bianca Phillips

#5

Plans for the new  
Allen Combined  
Cycle gas plant

*TVA may drill wells into the Memphis Sands aquifer to cool new gas plant.*

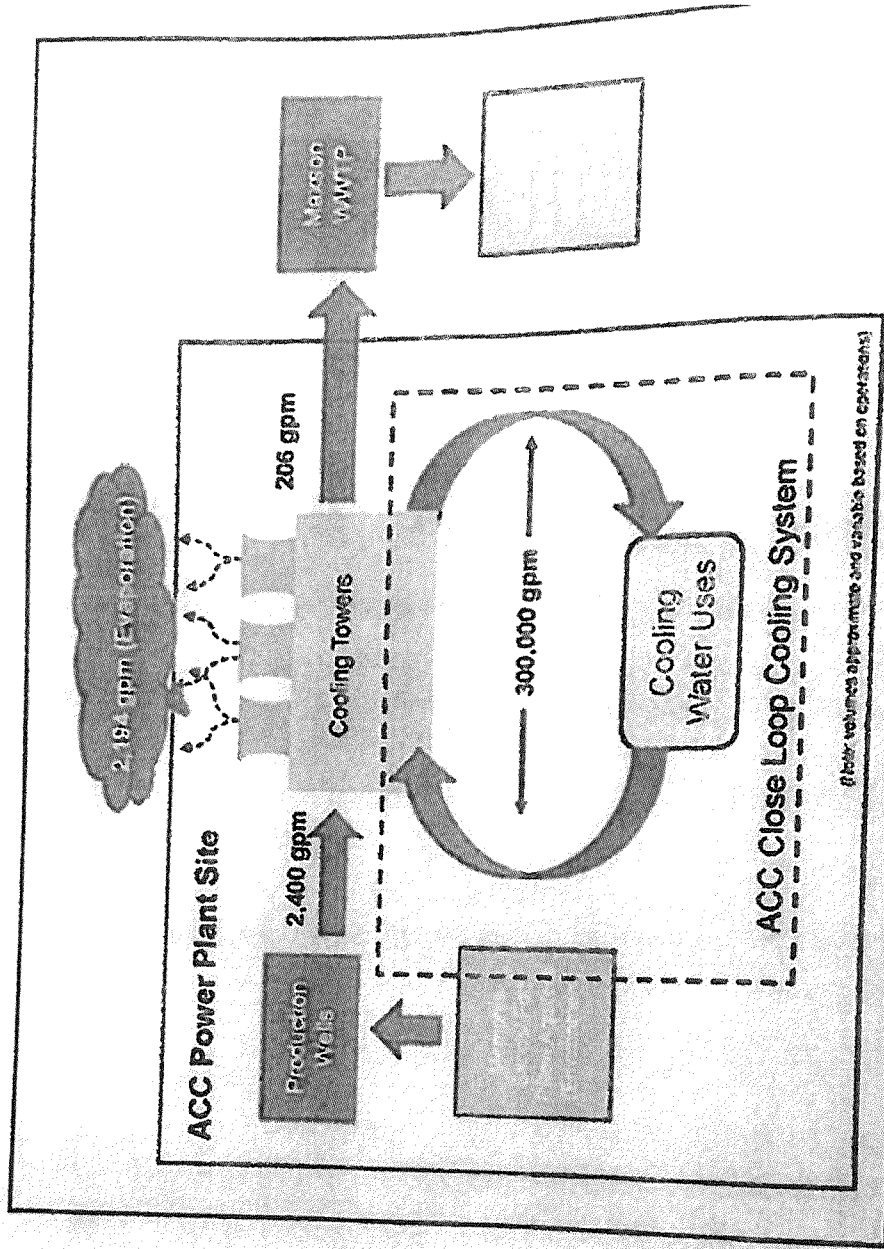
The source of Memphis' beloved clean drinking water — the Memphis Sands Aquifer — could soon be tapped for up to 3.5 million gallons of water per day to cool the Tennessee Valley Authority's (TVA) new, under-construction gas plant.

In 2014, when the TVA approved plans for the Allen Combined Cycle gas plant that will replace the Allen Fossil coal plant in 2018, they said they'd be using wastewater from the nearby Maxson Wastewater Treatment Plant for its cooling water system.

But those plans have turned out to be too expensive, according to a report from TVA, since using wastewater would first require treatment due to pollutants in that water.

"It would add more than a billion dollars a year to the operating costs," said TVA spokesperson Chris Stanley.

Now, they're looking at a few alternatives — either drilling five wells into the aquifer and pulling water directly from the ground, purchasing potable water from Memphis Light, Gas, & Water (MLGW), or some combination of the



two. If potable water is purchased from MLGW, that water would come from both the Memphis Sands and the Fort Pillow aquifers, but the TVA environmental assessment

*continued on page 6*



report says MLGW cannot sell the TVA enough water to meet peak demand.

"We may need both the [aquifer] well water and the backup potable water from MLGW," Stanley said.

Most of that water — about 90 percent — is evaporated in the plant's cooling process, and the rest will be discharged into the Maxson plant, Stanley said.

The TVA is under an agreement with the Environmental Protection Agency and several environmental groups, including the Sierra Club, to reduce emissions at its coal-fired plants by December 2018. In 2014, the TVA's board voted to close the Allen Fossil plant, which provides energy to the region, and replace it with a more environmentally friendly natural gas plant. The new Allen Combined Cycle plant is currently under construction in Frank C. Pidgeon Industrial Park, near the site of the Allen Fossil Plant.

The TVA must have the Allen Fossil Plant closed by December 2018, so they're looking to get the new plant online by June of that year. Stanley said they'd originally planned to use wastewater to cool the plant "to maximize environmental efforts."

But in April, the TVA issued a supplemental environmental assessment report on the aquifer issue, claiming either option would lead to "minor irreversible and irretrievable commitments of groundwater resources." Cooling the gas plant requires about 3.5 million gallons of water per day, but the aquifer is believed to hold around 57 trillion gallons. Stanley said the TVA wouldn't be the first local company to pull water directly from aquifer wells.

Still yet, not everyone is pleased with the TVA's new plan.

"It's depleting our aquifer," said Scott Banbury, conservation program coordinator for the Tennessee Sierra Club. "Most people in Memphis are pretty stoked that we have this awesome source of water. The TVA did some basic calculations on the cone of depression it would create, and they describe that as negligible, but it's still a depletion."

Banbury said he's upset that the public wasn't given an opportunity to comment on the issue.

"They tried to pull a switcheroo on us without giving the public an opportunity to weigh in," Banbury said.

The TVA released on its website the supplemental environmental assessment report looking at the new potential water sources back in April, but Banbury said he only learned of it recently since no meetings were held seeking public comment.

"We don't have to have those meetings by law, but we usually do," Stanley said. "But in this case, it's a decision we have to make quickly because we have to have the Allen Fossil Plant retired by December 2018." ■

**AMNESTY DUMPSTER DAY**

**September 17, 2016**

**7:30 AM - 1 PM**

**LOCATIONS: 1) PUBLIC WORKS      2) JOHNSON ROAD PARK**

**Environmental Commission Sign-up Roster**

<b>PUBLIC WORKS ON SOUTHERN</b>	
<i>Paul Montellier</i>	
<i>Susan Threlkeld</i>	

<b>JOHNSON ROAD PARK</b>	
<i>Lee Skelley</i>	<i>URAWIA ERSKINE</i>
<i>Jimmy Davis</i>	<i>Jayn Wagh</i>
<i>STEVE FLEISCHMANW</i>	<i>Scott Schoferacker</i>
<i>ROCKY LANDA</i>	<i>ANDY FOSTER</i>