

# **INTERIM JOINT COMMITTEE ON NATURAL RESOURCES AND ENERGY**

## **Minutes of the 4th Meeting of the 2019 Interim**

**September 10, 2019**

### **Call to Order and Roll Call**

The 4th meeting of the Interim Joint Committee on Natural Resources and Energy was held on Tuesday, September 10, 2019, at 3:00 PM, in Room 154 of the Capitol Annex. Senator Brandon Smith, Chair, called the meeting to order, and the secretary called the roll.

Present were:

Members: Senator Brandon Smith, Co-Chair; Representative Jim Gooch Jr., Co-Chair; Senators Jared Carpenter, Matt Castlen, C.B. Embry Jr., Paul Hornback, Robby Mills, Reginald Thomas, Johnny Ray Turner, Robin L. Webb, and Phillip Wheeler; Representatives John Blanton, Adam Bowling, Terri Branham Clark, R. Travis Brenda, Randy Bridges, Jim DuPlessis, Daniel Elliott, Chris Fugate, Angie Hatton, Derek Lewis, Suzanne Miles, Melinda Gibbons Prunty, Cherlynn Stevenson, and Rob Wiederstein.

Guests: Bruce Scott, Deputy Secretary, Energy and Environment Cabinet (EEC); Tony Hatton, Commissioner, Department for Environmental Protection, EEC; Jon Maybriar, Director, Division of Waste Management, EEC; Dan Bock, Landscape Architect, Operations and Readiness Division, Huntington District United States Army Corps of Engineers (USACE); Rodney Holbrook, Resource Manager, Fishtrap Lake, USACE; and Dr. Rick Honaker, Professor and Chair, Department of Mining Engineering, University of Kentucky.

LRC Staff: Stefan Kasacavage, Janine Coy-Geeslin, Tanya Monsanto, and Rachel Hartley.

### **Litter and Illegal Open Dump Cleanup Programs**

Tony Hatton stated the Litter Abatement Grant Program (LAGP) within the Kentucky Pride Fund (KPF) was established with the passage of HB 174 in 2002. The Kentucky Department of Transportation transfers \$5,000,000 annually to KPF for LAGP. The funds are distributed to counties based on road miles, total population, and rural population. Cities may apply for a portion of the funding. The funding is used for direct expenses associated with litter cleanup and litter prevention education. The recipients of the funds must report all expenses annually, and unspent funds must be returned. From 2003 to 2018, total litter expenditures of grant funding plus additional spending by cities and counties were \$126,302,172.

The Illegal Open Dump Grant Program was established with the passage of SB 50 in 2006. It is supported by the Environmental Remediation Fee of \$1.75 per ton of landfill waste within the KPF. A portion of the funds must be used for orphaned landfills. The total grant expenditures from 2006 to 2018 were \$18,839,206.

In response to a question from Senator Smith, Bruce Scott stated the EEC does not have the number of litter fines issued in 2018. EEC does not have litter enforcement authority. There are statutes that provide enforcement authority to state police (KRS Chapter 433) and to local government authorities (KRS Chapter 512). The EEC has had discussions to create a website for anonymous reporting of littering. Jon Maybriar stated investigating the origin of litter is a safety issue.

In response to a question from Representative Blanton, Mr. Scott stated local governments use digital media for public awareness about littering.

In response to a question from Representative DuPlessis, Mr. Hatton stated there are counties that do not participate in the grant funding.

In response to a question from Representative Lewis, Mr. Scott stated solid waste coordinators in some counties have other job responsibilities that impact their output.

Jon Maybriar stated in 2015 a large sewage leak into Big Sandy River in Virginia impacted Fishtrap Lake in Pike County and brought attention to the ongoing problem of excessive floating debris restricting the use of the lake. The Division of Waste Management (DWM) has been working on a solution. In 2018, DWM met with Pike County officials and USACE to devise a cleanup plan.

#### **Drift and Debris Management Plan for Fishtrap Lake**

Rodney Holbrook stated the majority of the debris in Fishtrap Lake comes from Virginia, because 95 percent of the watershed is located there. The majority of the waste is naturally occurring debris from trees and beaver dams.

COE signed an agreement with Pike County Fiscal Court in February of 2019 to utilize a \$126,000,000 grant from the state. Two phases of the cleanup have been completed. Two additional phases of cleanup will start in September 2019 and January 2020. There is also an agreement with Kentucky Pride to conduct annual volunteer lake cleanup.

#### **Rare Earth Element Recovery from Kentucky Coal Sources**

Dr. Rick Honaker stated the majority of rare earth elements (REEs) are located in China, which impacts manufacturing costs. Manufacturing is a large part of Kentucky's economy. REEs are used in manufacturing phones and batteries.

Researchers at the Massachusetts Institute of Technology estimated that in 2010 the world consumption of REEs was 125,000 tons annually, and China supplied 74,000 tons annually. China purchases REEs from other countries and controls the majority of the resources. The United States uses approximately 10,000 to 12,000 tons REEs annually.

The worldwide number of electric vehicles is expected to increase from around \$4,000,000 today to \$400,000,000 by 2040 and will require an increase of REE production of around 60,000 tons annually.

In 2014, the University of Kentucky conducted a study and found the total amount of REEs contained in the coarse refuse generated from 20 active coal preparation plants. The total amount of REEs in the coarse refuse would generate 50 percent of the annual demand for REEs in the United States. Kentucky has more than 50 coal preparation plants and could meet the need for REEs in the United States.

There is an REE pilot plant, funded by the Department of Energy, in Providence, Kentucky. The plant processes REEs from coal and coal byproducts in Kentucky. The pilot plant has been successful in creating a concentrate that is 99 percent pure REEs material. Based on a preliminary assessment of a single hypothetical REE recovery plant, the plant could generate \$6,000,000 in state and federal income tax per year and create 50 new jobs.

In response to a question from Senator Webb, Dr. Honaker stated there are security protocols to protect the intellectual property of this new technology.

In response to a question from Representative Elliott, Dr. Honaker stated REEs are recycled by dissolving and reconcentrating the material. The process is very expensive. Large companies, such as Lexmark and Apple, are interested in recycling REEs.

In response to a question from Representative Gooch, Dr. Honaker stated China could stop selling REEs anytime and manufacture the final product.

In response to a question from Representative DuPlessis, Dr. Honaker stated REEs have a very low concentration of radioactive materials.

In response to a question from Senator Thomas, Dr. Honaker stated REEs are used to produce a lot of materials used by the Department of Defense.

There being no further business, the meeting was adjourned.