



**READING CHAPTER**  
**PENNSYLVANIA SOCIETY OF PROFESSIONAL ENGINEERS**

## **PSPE Reading Chapter Report**

January 20, 2018

### **Chapter President's Message**

The Reading Chapter of PSPE has remained busy during the last quarter of 2017. Regularly scheduled meetings were held monthly with the Board and highlights from the meetings include establishing parameters for a new Chapter website; the discussion of an exciting new Science Center for Reading which is being spearheaded by a Board member; and planning out events for the remainder of the 2017/2018 year. During the winter months, the Chapter participates in a few events promoting STEM and math related contests. The MATHCOUNTS competition will be happening in February and is one of the showcase events for our Chapter. This is put on by the Reading Chapter and staffed by its members and families for the middle schools in Berks County. Board members also participate as judges in the PA Governor's STEM Competition for high schools in Berks County, which is run by the Berks County Intermediate Unit (BCIU). Over the past few months there has been two tours facilitated by the Reading Chapter, including the Blue Marsh Dam and the Spring City Electric Manufacturing facility.

### **Reading Science Center**

Environmental engineer and past president of the PSPE Reading Chapter Jim Cinelli has taken the first steps to establish a science center in Reading. The Reading Science Center's purpose will be to introduce the concept of Interactive Science Learning to everyone in our area, and our elementary school age students in particular. Studies have shown that access to science centers positively impacts young people's perception of science and math, and leads to more of them entering careers in science and engineering. If you are interested in becoming involved, feel free to reach out to Jim at [jcinelli@libertyenviro.com](mailto:jcinelli@libertyenviro.com).



### **2018 MATHCOUNTS Competition**

The 35th annual Berks County MATHCOUNTS competition will be held on Saturday, February 10, 2018 at Penn State University – Berks Campus. MATHCOUNTS is a competitive program designed to improve and encourage the study of mathematics by middle school students. The program will culminate in one day of mathematics exams for both individuals and teams comprised of four rounds: Sprint, Target, Team, and Countdown.

This year's competition will include a total of 137 sixth, seventh and eighth grade students representing 16 Berks County schools. The competition is sponsored and staffed by the Reading Chapter of the Pennsylvania Society of Professional Engineers (PSPE). The top four finishers, along with the winning team, will travel to Harrisburg on March 23-24 for the State Competition. The National Competition is May 13-14 in Washington, DC.

### **PDH/Networking opportunities provided by Reading Chapter**

The Reading Chapter also provided and has planned various PDH/Networking opportunities for the 2017-2018 schedule, some of which include:

- Blue Marsh Dam Tour – Tour Summary attached to this document,
- Spring City Lighting Tour – Tour Summary attached to this document,
- Holiday Mixer and Hidden Still Tour (Jan. 2018),
- Engineering Ethics Lunch & Learn (Feb. 2018),
- High Industries Tour (March 2018),
- City of Reading WWTP Tour (April 2018),
- Annual Reading / Valley Forge PSPE Golf Outing (May 2018).

## Reading Chapter PSPE – Late 2017 Tour Summaries

### Blue Marsh Dam Tour Summary

The Reading Chapter of PSPE enjoyed a tour of the US Army Corps of Engineers Blue Marsh Dam on October 30, 2017. The Chief Dam Operator, Jeffrey J. Omlor, provided an entertaining and thorough tour of the facility, including the dam control facility and the lake's spillway. Construction of the earthen dam and facilities occurred between 1974 and 1979 primarily for flood control. The tour included traveling down through the multiple levels of the control tower to understand how the level of the lake is adjusted including valve operation and controls as well as the maintenance involved. The 48-inch diameter discharge pipe from the control tower extends 500-feet horizontally to the stilling basin. It was interesting to learn that the difference between the typical high and low level for the lake is within 5-10 feet.



Photo of Blue Marsh Lake Dam and Control Tower.



Photo of Control Room for Dam.

### Spring City Lighting Tour Summary

The Reading Chapter of PSPE participated in a thorough tour of the manufacturing facility for the Spring City Electrical Manufacturing Company on November 29, 2017. The tour was conducted by Alan Brink, the President of Spring City Manufacturing. Spring City manufacturing's facility was founded back in 1843 and the foundry has remained there since. The tour included a step-by-step of the process for constructing the lamp poles from the patterns used (of which they have more than 3,000) to the flask entombing the pattern where it is then outlined with



Photo of Lamp Post Molds

compacted sand making the impression for the iron which is poured in after reaching a white-hot state. After the iron is cooled, the finishing of the product includes grinding, drilling and painting. The tour and process was unique in that we were able to witness a process performed over hundreds of years integrated in with finishing practices utilizing robotics and precise equipment relying on computerized inputs with a finished product which looks both historic and utilizing the latest patented LED lighting technology.

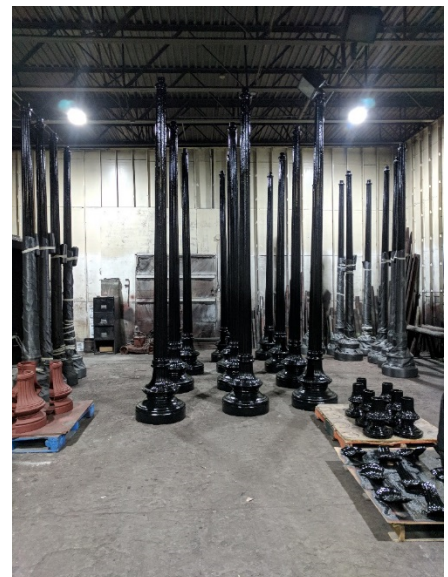


Photo of Finished Lamp Posts