

# Earth Day 2012



## Career Profile

**Name:** Robert K. Lewis, Jr.  
**Job Title:** Environmental Group Manager, Hazardous Sites Cleanup Program  
**Location:** Northeast Regional Office  
**Years with DEP:** 25 ½

### **What kinds of activities do you perform on a daily basis?**

I manage a staff of nine technical professionals that oversee the cleanup of state and federal superfund projects. Some of the projects we get involved with include soil clean up and groundwater remediation projects. We recently entered into an agreement with two companies to construct over 20 miles of waterline in four different townships to provide water to over 220 homes that were affected by groundwater contamination. The two companies will also be remediating soil and groundwater. The one company is using a technology called electrical resistance heating (ERH), to clean up trichloroethylene, a degreasing compound that was prevalently used by metal fabricators over the years. The ERH cleanup is one of the first uses in Pennsylvania on this scale. We were also recently involved with a case concerning two children with confirmed diagnosis of Clostridium Difficile, a bacterium that can cause severe colon problems and even death. The parents thought the children were affected by the flooded soccer fields. We worked with the Agency for Toxic Substances and Disease Registry, the Center for Disease Control and the PA Department of Health to evaluate the potential for the two children to be affected by the soccer fields that were flooded. Every day is very different and challenging.

### **What kind of educational background do you have?**

I have a bachelor's degree in biology and chemistry.

### **What is the most challenging part of your job?**

Working through the variety of regulations required to complete a project is very challenging. Projects often require coordination between several DEP programs and other agencies at the state and federal level, including the PA Department of Transportation, the PA Department of Health, the US Environmental Protection Agency, the Center for Disease Control, the Agency for Toxic Substances and Disease Registry and the US Army Corps of Engineers.

### **What got you interested in working in an environmental field?**

When I was a young lad I spent a great deal of time with our family camping, boating, fishing and hunting in Pennsylvania, New York and Canada. I loved the outdoors and my father taught me about many aspects of the environment, including types of trees and varying species of birds and animals in Pennsylvania. In 1968, Dr. Maurice Goddard was in town to dedicate the opening of Frances Slocum State Park. My neighbors and I went over to the park early in the morning because we had heard they had stocked the new lake with some large fish. We did not catch any large fish when a thunderstorm swept in. My neighbors and I rushed up to the park office to take shelter. There was a stately looking gentleman who introduced himself as Dr. Maurice Goddard. He offered to take us back to our homes, fishing equipment and all! I had no idea who Dr. Maurice Goddard was at the time. As we rode back to our homes, he talked to us about the fishing and also about forestry and state parks. He was very personable and you could tell he loved to teach. His dream and vision was to have a state park within twenty five miles of every person in Pennsylvania. Our parents invited Dr. Goddard to stay for a picnic and he graciously accepted. I was amazed later to find out from my parents who Dr. Goddard was. He had sparked my interest in the environment even more and I was amazed at his vision for parks, forestry and the environment in Pennsylvania. He helped create and was the first Department of Environmental Resources Secretary.

**What is the most rewarding part of your job?**

It is rewarding to protect people from soil and groundwater contamination and working with various state and federal partners on our projects. I also love teaching people to be good stewards of the environment; cleaning up the environment once it is contaminated takes time, energy and money.

**What advice do you have for someone thinking about a career in environmental science?**

The environmental science field has changed dramatically over the past couple of decades. There are new technologies to clean up the environment, including cleaning up soil, air and water. There are new sampling and testing methods. More is being discovered about chemicals that have been used for decades and are a threat to the human health and the environment. There are new areas that have become more important to understand like vapor intrusion and how chemicals migrate in the soil pore space. Marcellus Shale and the search for natural gas are on the forefront. The environment is constantly changing. Therefore, we are challenged to continue to learn more about the environmental field as we work in it.

I would encourage a college student to get environmental life experience through an internship. DEP offers varying internship opportunities. The department oversees many various aspects of the environment through our varying programs. We regulate air, water, waste, soil and minerals such as oil and gas, coal and stone. The oil and gas field and fracking is relatively new with the exploration of the Marcellus Shale. I would encourage a student to learn more on this subject. There are two fields that will continue to need staff in upcoming years. Those fields include geology/hydrogeology and engineering. There are various types of positions within DEP. They include water specialists, air specialists, waste specialists, soil scientists, chemists, biologists, engineers and geologists/hydro-geologists. I would encourage a student to learn which unique area they may be interested in and possibly take more courses in that particular area or possibly major in that area.