

## Annual Scholarship

Summary by Rochelle Routman,  
Georgia Power Co.

**Sheldon Gen**, a doctoral student at the Georgia Institute of Technology School of Public Policy, was the 2002 GA Chapter Scholarship winner. Sheldon's research in the area of cost-benefit analysis was selected because it stood out as timely, original, and universally beneficial. Sheldon is conducting an analysis of existing environmental valuation practices to measure their consistency and test their external validity. The analysis will be performed on a sample of environmental valuation studies representing the current practices in each method. The results of his research will describe the contexts in which valuation methods can be properly used. Sheldon's immediate goal is to obtain a teaching position at a university.

*Good luck Sheldon! We hope you will join us at a future AWMA conference –as a speaker!*



Sheldon Gen receives his scholarship from Chapter Director Rochelle Routman and Chapter Chair Karen Dorman

## **A&WMA Georgia Chapter Environmental Awards – 2002**

**Summary by Tom Bills, Awards Committee, Rindt-McDuff Associates**

Each year, the Georgia Chapter has the opportunity to recognize private firms and governmental entities which have instituted practices or procedures demonstrating a dedication to go beyond regulatory compliance to yield real environmental improvement. Competition for these awards, which fall into four categories, is always tough, but this year was by far the most closely contested. Each winner demonstrated environmental improvements which also translated directly to the bottom line in the form of cost avoidance, energy savings, or through the sale of reclaimed materials. Awards were presented by Awards Committee Chair, Sean Nicholl of Rindt-McDuff. This year's winners are described below:

### **Synthetic Minor/Area Source: Compliance Management Program**

**C.W. MATTHEWS CONTRACTING COMPANY** is the largest privately owned road and bridge contractor in Georgia. The company also owns and operates 12 asphalt plants to supply their construction projects and for product sales to the general public. CWM's Plant #6 in Cartersville produces nearly 160,000 tons of asphalt per year. As part of a comprehensive Compliance Management Program, this facility has undertaken the following activities:



Awards Chair Sean Nicholl and Brian Lawrence

- The emission control system recirculates unburned fuel and product VOCs back into the burner;
- Dust generated during the process is captured and reintroduced into the final product;
- Waste oil makes up 90% of the burner fuel consumed;
- The final product contains 30% to 40% recycled pavement.

### **Major Source: Compliance Management Program**

**THE AMERICAN PROTEINS, INC.** facility in Cumming, GA accepts approximately 25 million pounds per week of by-products from the poultry processing industry. These materials are rendered into saleable high protein feed additives for livestock and pet foods. The rendering process is energy intensive, generating air emissions which must be managed under the facilities Title V permit, as well as large quantities of wastewater. The nature of the business can also lead to objectionable odors, which the firm works hard to manage on behalf of their neighbors.



From Left: Ken Smith, Sean Nicholl and Roger Smith

American Proteins' Compliance Management Program has led to the implementation of two particularly noteworthy initiatives:

- Using a large scale biofilter, the plant removes over 40,000 pounds per year of VOCs from the facility's air emission stream, as well as controlling much of the odor problems. Frequent and consistent monitoring of the biofilter beds ensures optimal operation of the system.
- The plant captures and compresses biogas from their anaerobic wastewater digestion lagoon, and introduces it as fuel into their boiler system. The methane in the biogas offsets an equivalent volume of natural gas, yielding considerable cost savings while reducing NOx emissions by over 14,000 pounds per year.

## Hazardous Waste Management Program

**ADVANTIS TECHNOLOGIES** develops, manufactures and distributes water treatment chemicals for use in swimming pools, spas, ponds, irrigation systems and cooling water reservoirs. End products are in liquid or solid form, packaged in containers ranging from 4 ounces to 275 gallons. Advantis implemented a variety of parallel programs to control hazardous waste, wastewater requiring treatment, and air emissions, increase recycling, reduce raw material inventories and increase employee commitment and awareness.

To date, Advantis' hazardous waste management program has yielded the following results:

- Reformulated certain products to eliminate hazardous raw materials, including all flammable solvents and sulfamic acid;
- Eliminated all solid hazardous waste;
- Eliminated hazardous wastewater discharges to sanitary sewer;
- Reduced by 25% the volume of wastewater hauled for commercial treatment;
- Discontinued use of PVC containers in favor of clear PETP containers;
- Recycled all polyethylene bottles, aluminum, fiberboard and paper.



From Left: Sean Nicholl, Kent Connole and Peter Belle

## Waste Minimization/Pollution Prevention

The **GEORGIA DEPARTMENT OF CORRECTIONS (GDC)** Composting and Baler Recycling Programs were initiated to respond to two separate challenges:

- Some local landfills had banned prison kitchen food waste. Also, local POTWs were considering applying surcharges for treating prison wastewater high in solids and BOD due to kitchen food waste.
- Tipping fees were high and rising for all categories of solid waste.

Under their new programs, food waste at each of the participating prison facilities is mixed with landscape trimmings and then composted in managed windrows. GDC Farm Services uses the finished compost as a soil amendment, in place of chemical fertilizers. Aluminum, corrugated paper board, office paper, plastics and steel are separated and baled for collection and sale. Revenues from sale of recyclables are used to offset fuel, maintenance and equipment costs of the program.



From left: Boyd Leake (Community Environmental), Sean Nicholl (Rindt-McDuff), Larry Latimer (Asst. Director DOC Engineering), Bob Plemons (Community Liaison DOC Engineering), Nancy Allen (Community Environmental), Joe Ferrero (Asst Commissioner DOC), Steve Neadow (EMS Manager DOC Engineering).

Total cost savings in avoided tipping fees and reduction in chemical fertilizer expense are in excess of \$600,000 for FY 2002. The total quantity of solid waste diverted from landfills totals over 12,000 tons over this period.