



## Questions and Answers

### Georgia-Pacific and Palatka Pulp & Paper Operations

#### **What is Georgia-Pacific?**

Headquartered in Atlanta, Georgia-Pacific is one of the world's leading manufacturers and marketers of tissue, packaging, paper, pulp, and building products and related chemicals. The company employs approximately 50,000 people at more than 300 locations in North America, South America and Europe.

#### **What is Palatka Pulp & Paper Operations?**

The pulp and paper mill in Palatka, Florida is the home of Georgia-Pacific's largest retail tissue converting operation. It produces 210,000 tons of consumer grade tissue and 300,000 tons of linerboard, multi-wall and specialty grades of Kraft paper annually. The mill first opened in 1947, and was the first facility to manufacture tissue from southern pines and hardwoods.

#### **What products are manufactured at the mill?**

The paper products produced at the mill are sold under the brand names of Angel Soft®, Sparkle®, Quilted Northern®, and Brawny®, and find their way to American consumers through retailers such as Wal-Mart, Publix, Winn-Dixie, Kroger and Dollar General.

#### **Where is the mill located?**

The mill is located in Palatka, which is in Putnam County in northeast Florida, south of Jacksonville. The mill sits on Rice Creek, which flows into the St. Johns River, a major waterway for the metropolitan area. The 580-acre manufacturing facility sits on 6,000 acres of Georgia-Pacific property, and is the southernmost pulp mill in the U.S.

#### **How many people does the mill employ?**

Palatka Operations is Putnam County's largest private employer. It provides jobs for more than 1,000 citizens from Putnam, Clay, St. Johns and Alachua counties. Our payroll exceeds \$86 million each year, and the operating budget exceeds \$300 million. We also spend \$13 million each year in Putnam County alone, and more than \$4 million is paid in local taxes, which have a significant impact on the local economy.

#### **Why has Georgia-Pacific invested so much in the Palatka community?**

Georgia-Pacific's goal is to be a vital part of the local community, not just a company that is located *in* the community. The success of the mill is closely tied to that of the Palatka community. We are a major employer in the area, and we accept the many important responsibilities that go along with that position. Our employees lead and participate in activities that foster local economic growth and enhance the quality of life in Palatka through volunteer work, contributions and fund-raising efforts.

## **St Johns River Accord and Our Environmental Commitment**

### **What is the St. Johns River Accord?**

In an effort to improve the health of the St. Johns River, the State of Florida and City of Jacksonville recently launched a 10-year, \$700 million cleanup project called the River Accord, which is a mix of cleanup and prevention efforts aimed at enhancing the quality of the river.

### **Does Georgia-Pacific support the River Accord?**

Georgia-Pacific is a proud supporter of the River Accord, and over the last decade, has spent a total of \$250 million on environmentally beneficial upgrades for the Palatka mill, creating a state-of-the-art operation that has resulted in environmental progress on the ecosystems of Rice Creek and the St. Johns River basin. The majority of the spending, \$200 million, was for environmentally beneficial manufacturing process upgrades that improved effluent water quality.

### **Why has Georgia-Pacific invested so much in the Palatka mill?**

Georgia-Pacific is committed to meeting clean water standards and protecting the quality of Rice Creek and the St. Johns River basin. We've already invested hundreds of millions of dollars to improve water quality, and we will continue to make improvements to do so. We realize that success requires us to follow through on our commitment to protect the environment and work with the Palatka community to reduce its environmental footprint so that the natural beauty of the St. Johns River basin will be preserved for future generations.

## **Palatka Mill Upgrades**

### **What was the basis for determining which improvements were appropriate?**

The improvements made to the Palatka mill came out of a cooperative agreement that we reached in 1998 with the U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (DEP). Under the terms of the agreement, we voluntarily agreed to implement state-of-the-art manufacturing upgrades to improve water discharge quality. The improvements went above and beyond the requirements of the EPA and the Florida DEP, and furthermore, the work was completed ahead of schedule, demonstrating our environmental leadership and commitment to the Palatka community.

### **Were the upgrades to the mill required?**

Many of the modifications to the mill were not required to meet existing effluent standards for pulping and bleaching systems contained in the EPA's standards for the pulp and paper industry, known as the "Cluster Rule." However, the upgrades were agreed to by Georgia-Pacific in good faith to improve the environment while also meeting the desires of state and federal government officials. Of the \$200 million spent for manufacturing process improvements, more than \$100 million was for technology improvements that were not required by the EPA's Cluster Rule.

### **What specific manufacturing improvements were made?**

Four key manufacturing process changes were installed at the mill. They included: a new bleach line that resulted in significant reduction in water consumption and improvement in the quality of the mill's effluent; a brownstock washing system that washes out the chemicals and organic matter that help bind the pulp together; an oxygen delignification system that helps reduce the amount of chemicals used in pulp bleaching while recovering more organic matter back into the mill recovery process; and a new dregs filter to reduce the conductivity (saltiness) of the mill's effluent.

### **Can you provide more details on these changes?**

Elemental chlorine-free (ECF) bleach plant: The first major manufacturing change to the mill was the installation of a new \$66 million bleach line at the plant. Elemental chlorine was removed from the bleaching process at the facility in 2002, resulting in a significant reduction of water consumption and improvement in the quality of the mill's effluent.

Brownstock washing system: A key part of the manufacturing process is preparation of pulp for the bleaching plant. A brownstock system "washes out" impurities (chemicals and organic matter) that bind the pulp together. Georgia-Pacific invested \$94 million (including the oxygen delignification system listed below) to install a new, state-of-the-art brownstock washing system in Palatka. Optimizing the brownstock system has reduced the amount of bleaching chemicals needed to process its products.

Oxygen delignification: The process of delignification reduces the brown color found in natural wood, therefore reducing the amount of chemicals used in the production of the mill's products. Oxygen delignification is an alternative to using chemicals such as chlorine to bleach the paper.

Dregs filter: The installation of the company's dregs filter significantly reduced conductivity in the mill's effluent. Inert materials, or chemical solids, are now removed, dewatered and reclaimed to landfill. Prior to the installation of the dregs filter, those chemical solids and associated process chemicals were sewered and entered the mill's effluent treatment system.

### **If high-tech improvements were made, why is there still discharge?**

The upgrades ultimately implemented at the Palatka mill represent state-of-the-art technology. Georgia-Pacific, the EPA and its technical experts, along with the Florida DEP carefully explored various technologies and improvements for upgrading the Palatka mill. The options of closed-loop and zero-discharge technology were considered, but were not technically feasible for the type of mill that Georgia-Pacific operates in Palatka.

### **What was the timeline for implementing the upgrades and improvements?**

As part of the agreement with the EPA and Florida DEP, Georgia-Pacific had until 2008 to implement the proposed technology. However, all of the equipment outlined in the agreement was installed ahead of schedule, demonstrating Georgia-Pacific's environmental leadership and commitment to the Palatka community.

### **What is an NPDES permit, and how does it affect the mill?**

The Clean Water Act prohibits the discharge of industrial municipal or agricultural waste into water unless they have a National Pollutant Discharge Elimination System (NPDES) permit, which contains limits on what can be discharged, the monitoring and reporting requirements, and provisions to protect humans and aquatic life. The Palatka mill's NPDES permit is up for renewal.

### **Are there any other benefits besides environmental ones in the agreement reached with EPA and the DEP?**

The agreement that Georgia-Pacific reached with the EPA and the Florida DEP protects the jobs of 2,200 employees who rely on the timber industry in Putnam County for their livelihood.

## New Pipeline

### **Why does Georgia-Pacific want to move the effluent entry point?**

Relocating the mill's treated effluent discharge point represents the final step in the process that we began several years ago with the EPA and DEP to improve the environment of the St. Johns River basin. Our hope had been that we would not have to build the pipeline, and that in-plant changes would allow us to stay in Rice Creek. Despite the improvements in the quality of our effluent, relocating our discharge point is necessary to complete the plan for the protection of Rice Creek due to its small size and flow. The environmental improvements gained by relocation of the pipeline will allow the grassbeds along Rice Creek to improve and for the Creek to return to its natural state.

### **Will this new pipeline to the St. Johns River be visible? Will it be above-ground?**

Once it leaves Georgia-Pacific's property the pipe would not be visible nor accessible by the public.

### **Has groundwater consumption been reduced at the mill?**

There has been a 40 percent decrease in water consumption at the mill since 1998 and it is 90 percent less dependent on groundwater. This was partly due to a \$5 million investment to construct a 90 million gallon storage basin, which stores enough excess rainwater to operate the mill for four days without utilizing groundwater.

### **Won't the new pipeline mean you can increase production, thereby, increasing the amount of effluent?**

Georgia-Pacific's production has decreased as a result of the new technologies listed above. Georgia-Pacific is not only required, but also committed to meeting water quality standards.

## St. Johns River Basin Ecosystem

### **Some people say Rice Creek is dead. Is this true?**

No. If you take a boat ride on Rice Creek, you will not be alone. There are alligators, fish and even manatees active in the waters. Before we release a single drop of water into the Creek, it is treated for 60 days in biological treatment ponds, and 99.9 percent of our effluent volume is water. Only 0.5 percent of the nutrient material entering the St. Johns River comes from the mill's treated effluent. The remaining 99.5 percent comes from other point source dischargers such as wastewater treatment plants and non-point source dischargers (i.e., farms and residential users).

As our \$250 million investment demonstrates, Georgia-Pacific is committed to meeting clean water standards and protecting the quality of Rice Creek and the St. Johns River basin. We will continue to protect the environment and work with the Palatka community to reduce our environmental footprint and protect the natural beauty of the St. Johns River basin for future generations.

### **How have nutrient levels improved in Rice Creek?**

The mill has made dramatic reductions in contributions of nitrogen and phosphorus to the St. Johns River. From the 1997/1998 baseline used to establish the total maximum daily load (TMDL), the mill has slashed phosphorus and nitrogen contributions well below the current TDML allocations from the Florida DEP. Nevertheless, Georgia-Pacific continues to evaluate ways to reduce nutrients and improve water quality. For more information, please visit the St. Johns River Water Management District's Website at: [www.sjrwmd.com](http://www.sjrwmd.com).

**Has dioxin from the mill affected the fish population?**

An evaluation of dioxin in fish tissue at locations near the mill and at other sites in the St. Johns River basin has been ongoing since 1996. The study has been managed by Georgia-Pacific with oversight of the program conducted by scientists from the DEP and the Department of Health. Since the mill converted its bleaching processes to be elemental-chlorine free in 2002, fish tissue concentrations near the mill discharge have been consistently low and similar to fish tissue concentrations in other locations in the basin. The State of Florida does not have a fish consumption advisory for dioxin, and concentrations downstream from the mill and at other collection locations are below the state advisory thresholds set by other states.