



Mount Vernon Mills, Inc.

2019 SUSTAINABILITY REPORT

Mount Vernon Mills, Inc. is a diversified and integrated manufacturer of fabrics and other textile products, along with chemicals for textiles and other markets. Employing about 2,400 people, Mount Vernon operates 12 manufacturing and/or distribution facilities in the United States, located in North Carolina, South Carolina, Georgia, Alabama and Mississippi. Mount Vernon has two subsidiaries: Mount Vernon Chemicals, with its three divisions Apollo Chemical, FCI and PhilChem, provides wet and dry chemistry for textiles, paper and other industrial and commercial markets. Smith and Waters, Inc., the other subsidiary, provides over the road truck delivery services. Besides the Chemicals group, Mount Vernon has four other manufacturing divisions: Apparel Fabrics, Brentex, LaFrance and Consumer Products.



Mount Vernon's Apparel Fabrics Group flagship operations located in the northwest Georgia community of Trion.

The Apparel Fabrics Group has approximately 85% of textile manufacturing capacity and employment of the company, located at Trion, Georgia and Alto, Georgia. This sustainability report addresses specific long-term and near-term achievements of these operations, as well as overall progress on Greenhouse Gas (GHG) emissions, and product and social compliance for the Apparel Fabrics Group and the company as a whole.

The report is organized into the following sections:

Section I – Long-term Pollution Prevention & Sustainability Accomplishments

Section II – Near-term Pollution Prevention & Sustainability Accomplishments

Section III – Greenhouse Gas (GHG) Emissions

Section IV – Pollution Prevention Awards and Recognition

Section V – Products, Social Compliance and Community

Section VI – Global Sustainability: How Sustainable Indeed Is Our Competition?

Section I

Long-Term Pollution Prevention & Sustainability Accomplishments



A blue heron with the "50 yard line" fishing spot on a rock in the Chattooga River in Trion, Georgia adjacent to Mount Vernon's facility. These guys know where the best fishing is because it's not just their hobby.

Extensive efforts were made in the 1990's to eliminate from our process chemistry any regulated chemicals requiring reporting to EPA under Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA), as well as any chemical considered a Hazardous Air Pollutant (HAP) under the 1990 Clean Air Act Amendments. Working with our vendors at the time, we were able to eliminate nearly all of these regulated chemicals from our manufacturing. Today, Mount Vernon is not considered a major source of HAP by EPA at any of its locations. We have also minimized our Volatile Organic Compound (VOC) emissions by carefully screening our chemicals and to the greatest extent possible using only those that are based on the most state of the art technology to be

environmentally friendly and safe. By not using regulated chemicals to begin with, it prevents them from also having to be treated at wastewater treatment plants and eliminates the possibility that they would potentially pass through to the receiving stream. Additionally, by not using regulated chemicals in our textile manufacturing operations, we can avoid becoming a potential Large Quantity Generator (LQG) of hazardous waste. All of these locations are considered Very Small Quantity Generators (VSQG) of hazardous waste by EPA, as little if any hazardous waste is generated.

- None of the processed fiber waste from Mount Vernon's Apparel Fabrics Group, which represents the vast majority of total manufacturing waste, is landfilled: 18% is reclaimed and reusable back into the process and 82% is non-reusable and recycled off-site.
- Other materials that are recycled include cardboard, paper, plastic wrap and film waste, wood pallets, empty drums and totes, scrap metal, printer related cartridges, and universal wastes such as computer equipment and other e-waste, batteries and used fluorescent lamps. Only 8% of total solid waste cannot be recycled or reused in some fashion today, down from nearly 25% twenty years ago.
- Mount Vernon's Trion, Georgia location is Chattooga County's largest employer, but generates less than 5% of the county's solid waste.
- Since 1999, regulated air pollutant emissions have been **reduced** by 68%.
- Since 1999, volatile organic compound air emissions have been **reduced** by 65%.
- Since 1999, water withdrawal from Trion Spring, which includes Mount Vernon's process water and drinking water for the Town of Trion, has **decreased** by 38%.

- Since 1999, the organic pollutant loading (Biochemical Oxygen Demand, or BOD) on the Trion municipal wastewater treatment plant which handles wastewater from our Trion Operations has been **reduced** by 60%. This has been accomplished in part by eliminating certain chemicals and replacing them with more environmentally friendly alternatives.
- Mount Vernon's Alto, Georgia yarn and fabric manufacturing operation is a zero discharge facility for wastewater.
- Biosolids from the Trion wastewater treatment plant are beneficial and highly desired by local farms for nutrients, saving the agricultural community tens of thousands of dollars a year in crop fertilization costs. In addition, to help ensure that all biosolids get beneficially re-used, biosolids from the treatment plant have been **reduced** 61.5% since 1997, reflecting lower organic pollutant loading coming from the Mount Vernon operations. Additionally, a nearby landfill has expressed strong interest in the biosolids as a supplemental "wet" source of waste to accelerate methane production at the landfill. Methane produced is collected and used to run three large Caterpillar electric generators supplying energy to 5,000 households in the area. When inclement weather prohibits land application of biosolids in accordance with Clean Water Act Section 503 requirements, biosolids can be diverted to this landfill for this mutually beneficial purpose.



Mount Vernon Mills on the banks of the Chattooga River in Trion, Georgia. Photo from upstream at the Chattooga Dam.

Being located directly on the banks of a scenic river in Trion, Georgia, it would make sense that Mount Vernon would prioritize and effectively manage storm water runoff from its largest manufacturing operation. We do.

Section II

Near-Term Key Pollution Prevention Accomplishments

Trends in landfilled solid waste, water usage and energy consumption are reported as a ratio to units of production, in our case usually pounds or linear yards for textile manufacturing operations. Normalizing usage against units of production in this way more accurately reflects operational efficiency, and removes from the equation changes in business conditions, changes in fabric weight and process fiber blend, and other variables that might skew the results in one direction or the other if only raw consumption is considered. Cumulative savings of electricity and water are also reported since the baseline year, and are expressed with a metric that is easy for the consumer to envision.

For Mount Vernon's largest manufacturing facility in Trion, Georgia:

- We are only sending one third of the solid waste off-site to a landfill that we did 25 years ago. This represents less than 8% of all solid waste generated. However, due to world-wide demand for recycled materials having decreased in recent years, we have been challenged to find ways to reduce usage of or find alternative outlets for recycling certain materials that historically have been recycled. We are continuing to look for other recycling and waste minimization opportunities in order to send as little solid waste as possible to a landfill.
- From 2012 to 2019, water usage per pound of production has **declined** 22.7%.
- From 2012 to 2019, while total energy consumption per pound of production has **declined** 9.0%, the energy consumed per pound of production to generate steam has **declined** 13.6% while electricity usage per pound of production **increased slightly** by 0.4%.



The Dam on the Chattooga River, built in 1875 when the mill was rebuilt after a fire destroyed it. The original mill, completed in 1847, was shut down in 1864 when General Sherman's Union Army came through, but Sherman did not burn it. The 1875 building (Mill No. 1) is still in use today.

- Since 2008, we have saved 39,925,399 kWh of electricity through lighting upgrades, compressor air leak audit programs, motor upgrades and otherwise improving efficiency and using less energy per unit of production. This is equivalent to the average annual energy consumption of 3,652 U.S. homes.
- Since 2008, we have saved 790 million gallons of water by reducing, reclaiming and reusing it, enough to fill 21,583 20'x40' swimming pools (59 per day for one year). This amount would provide the 1,779 residents of Trion with water for over five years.



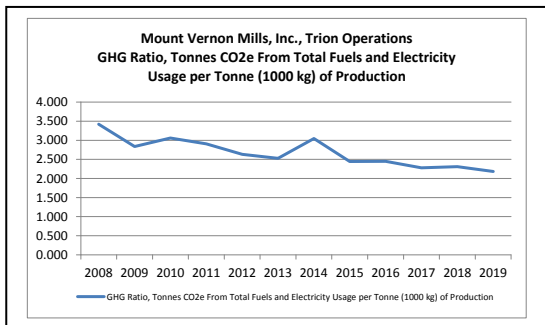
Chattooga Dam as viewed from Mount Vernon's operations. Notice the race to the right in the picture where water was diverted around the dam originally for hydroelectric power generation at the mill in the late 19th and early 20th Century. Today, river water is permitted for use as non-contact cooling water for chillers and air washers.

Section III

Greenhouse Gas (GHG) Emissions

Greenhouse gas (GHG) emissions, primarily carbon dioxide (CO₂), are tracked for on-site fuel combustion as well as for the associated emissions at the electric utility plant where we buy our electricity based on our electricity usage and the fuel mix that the generating plant used over the course of the year. This gives a more complete footprint of the impact of our manufacturing as it relates to GHG. The 2008 baseline in this report was chosen because EPA finalized the Greenhouse Gas Reporting Rule on October 30, 2009, providing the methodology for calculating GHG emissions for the first time utilizing calendar year 2008 data. Mount Vernon is required to report GHG emissions annually to EPA for its largest manufacturing facility located in Trion, Georgia under this rule. The rule methodology is also used to calculate our emissions accordingly for all other facilities.

- From 2008 to 2019, total GHG emissions from on-site fuel combustion and electricity usage at our Trion Operations have **declined** 41.2%.



- At Trion, GHG emissions from electricity as measured per kilogram (kg) of production **declined** by 39.4% during this period, while GHG emissions from fuel combustion as measured per kg of production **declined** 35.7%. Collectively, total GHG emissions from fuel combustion and electricity as measured per kg of production have declined 36.2% during this period (see graph).

- With this decline in total normalized GHG emissions, production also decreased 7.9% during this period at the Trion facility.
- Since 2008, Mount Vernon operations collectively have **reduced** CO₂ emissions by 438,969,000 kg. This is the equivalent of taking 99,180 passenger cars off the road and saving 49,322,000 gallons of gasoline.

Section IV

Pollution Prevention Awards and Recognition

Mount Vernon has received several prestigious awards for pollution prevention over the years.



A Bald Eagle making Mount Vernon's Trion Operations its home. This photo was taken on March 24, 2017 on the property near the ash settling ponds. Mount Vernon utilizes advanced venturi scrubber systems on its coal boilers, making the facility a minor source of hazardous air pollutants and sulfur dioxide emissions under the Clean Air Act. The facility can also burn natural gas in the boilers.

- 1999 Air and Waste Management Association Certificate of Achievement for significant achievement in going beyond regulatory obligation with respect to waste minimization and pollution prevention.
- 1999 Georgia Governor's Award for Pollution Prevention *Honorable Mention* in the large industry category.
- 2001 Georgia Governor's Award for Pollution Prevention *Winner* in the large industry category.

- Recognition as a Model Level Pollution Prevention Partner in the Georgia Pollution Prevention Partners Program.
- Recognition as a member of the South Carolina Environmental Excellence Program.

Section V

Products, Social Compliance and Community

At Mount Vernon, we take our responsibility to protect the environment in the communities where we operate very seriously. We also make it a top priority to protect our employees from potential chemical hazards by eliminating the use of harmful substances when at all possible. By virtue of minimizing or eliminating entirely the use of regulated chemicals in the manufacturing of our fabrics, we also extend this same priority to our customers' employees who handle them and the end wearer of our fabrics. All of the chemicals that are used are carefully screened in advance with this purpose in mind. In short, our fabrics are safe to handle and wear.

- Mount Vernon apparel fabrics comply with the limitations in the most recent version of the AAFA Restricted Substances List (RSL) and Appendix 4 of Oeko-Tex Standard 100 for Product Class II, though they have not been independently certified by the Oeko-Tex Association. The raw materials that we use are carefully screened for regulated chemicals on the RSL and regulatory lists from U.S. EPA, OSHA, EU REACH, and others before they are approved for use. When at all feasible, we avoid using regulated chemicals, but when the presence of a regulated substance is inherent in one of our raw materials and a viable substitute doesn't exist, we work with our vendors to seek a safer and more environmentally friendly alternative. High performance fabrics, including our flame resistant (FR) fabrics, durable press and wrinkle-free fabrics, and stain and water repellent fabrics are engineered to meet the performance expectations of our customers and the end user in the safest and most environmentally sustainable means possible using the latest state-of-the-art chemistry. For instance, our stain and water repellent chemistry meets the 2015 EPA directive to be PFOA and PFOS free, and these chemicals are not on the list of 160 Per- and Polyfluoroalkyl Substances (PFAS) added to the Toxics Release Inventory reporting pursuant to Section 7321 of the National Defense Authorization Act effective January 1, 2020. Also, our FR chemistry is based on either tetrakis hydroxymethyl phosphonium sulfate (THPS) or tetrakis hydroxymethyl phosphonium chloride (THPC), both being safe, non-regulated and non-halogenated (no bromine or chlorine) flame retardants.
- Dyes and chemicals used in Mount Vernon's textile operations comply with the limitations in Chapter 1 of the most recent version of the Zero Discharge of Hazardous Chemicals Programme (ZDHC) Manufacturing Restricted Substances List (MRSL).
- Mount Vernon's largest manufacturing facility in Trion, Georgia is routinely audited by 3rd party companies for social compliance on behalf of customers who are some of the largest garment manufacturers and retailers in the world, such as Carhartt, Levi Strauss, Cintas and JCPenney.

- Mount Vernon is a corporate member and supporter of the Coosa River Basin Initiative (CRBI), a local upper Coosa riverkeeper organization. We go above and beyond the minimum to be good stewards of the environment, even going so far as installing and operating one of first ozone systems on waste water effluent in the U.S. Discharging a high quality effluent into the Chattooga River with high dissolved oxygen content is beneficial to the river. With our source of water coming from an underground spring and not from direct surface withdrawal from the river, this discharge actually supplements the flow in the Chattooga River and the downstream Coosa River in Alabama to help maintain a level necessary to foster a healthy ecosystem and protect sensitive aquatic species all the way to the Gulf of Mexico.

Section VI

Global Sustainability: How Sustainable Indeed Is Our Competition?

Exposés on China's famed Pearl River Delta area of Guangdong Province, known as the "True Denim Capital of the World", by CNN, Greenpeace, Aetuba.com and others have uncovered the horrific pollution, poor working conditions and sick population behind 60% of the world's denim jean production. Yet U.S. fabric producers are held to the highest standards of sustainability, complying with EPA and OSHA regulations and the Fair Labor Standards Act, in order to capture the remaining market share. A very recent report quoted Chinese officials stating that they were worried about losing market share over price to the growing competition from Vietnam, Pakistan and India, all the while not being required to shoulder the cost to treat wastewater, control air emissions, screen chemistry for the safest and environmentally friendliest options, or provide a safe workplace. Greenpeace reported that in Xintang, a small industrial city in the Pearl River Delta, the "water in its river is indigo with strange smells, and the lungs of its workers are embedded with fine silica". Meanwhile, U.S. fabric producers must continue to lower costs while complying with strict environmental and safety regulations. At the same time, U.S. fabric producers are becoming more sustainable through reductions in electricity, water, and raw material usage per unit of production, generating less wastewater and air emissions, and eliminating harmful chemicals in manufacturing and on our final products. Much of our competition worldwide is not held to these same standards, nor do they have an interest in becoming more sustainable. U.S. fabric producers like Mount Vernon would surely be the suppliers of choice if the global playing field were level. Every time a survey on sustainability comes from a customer (undoubtedly aimed at their Asian suppliers) with an explanation that their objective is to develop a sustainable supply chain, our response is that we are already sustainable, we've already eliminated the bad chemicals, our wastewater effluent is cleaner than the receiving stream, our products are already safe to wear by the end-user, our Greenhouse Gas emissions have already been reduced substantially, and that our doors are open for *their* business. Additionally, no one in the world is as innovative as we are concerning the development of new products, whether they are high performance FR or basic denim. All they have to do is buy "Made in the U.S.A.". We think that the mood in America now is to do just that. Hopefully the garment manufacturers and retailers will take notice that their truly sustainable supply chain begins right here in the U.S. with Mount Vernon Mills.

Ronald J. Beegle

Ronald J. (Ron) Beegle, REM, REPA, CEA
Corporate Director of Environmental Affairs
Mount Vernon Mills, Inc.



Office of Environmental Affairs, 91 Fourth Street * P.O. Box 7 * Trion, Georgia 30753
(706) 734-4714 * FAX (706) 734-7708 * E-mail RonB@MVMills.com