

Bristol-Myers Squibb's Hopewell Campus: A Model of Environmental Stewardship

Bristol-Myers Squibb is a global biopharmaceutical and related healthcare products company whose mission is to extend and enhance human life. The company is committed to helping patients prevail over serious disease through the discovery, development, licensing, manufacture, marketing, distribution and sale of pharmaceuticals and related health care products. As embodied in the Bristol-Myers Squibb corporate pledge, the company is committed to protecting the environment and sustainability. Sustainability is defined as activity that meets the needs of the present generation without compromising the ability of future generations to meet their needs.

The company's Sustainability 2010 Goals, focus on activities that support continuous improvement, foster environmental stewardship, and demonstrate how the business of Bristol-Myers Squibb contributes to a better world for all.

Recognition

Bristol-Myers Squibb's sustainability practices and success have received recognition, including:

- Bristol-Myers Squibb earned "best in class" status for its leading environmental and social performance on the basis of Storebrand Investments' pharmaceutical industry overview, 2007.
- Bristol-Myers Squibb received the New Jersey Department of Environmental Protection (NJDEP) Watershed Management Award for Business-Industry, 2002.
- The Bristol-Myers Squibb Hopewell campus was nominated by the Stony Brook Millstone Watershed Association for the U.S. Environmental Protection Agency's first annual Water Efficiency Leaders Award which recognizes organizations who are providing leadership and innovation in water efficient practices, 2006.
- Bristol-Myers Squibb received first runner up for Best Sustainability Report in the Ceres-ACCA North American Awards for Sustainability Reporting. Ceres-ACCA (Association of Chartered Certified Accountants) are two socially responsible investment organizations that sponsor the awards to recognize exemplary reporting on sustainability performance by corporations, 2007.
- Goldman Sachs rated Bristol-Myers Squibb a Sustainable Investing Leader in their global pharmaceutical sector report, 2007.
- **Hopewell: Strategic Investment**

Bristol-Myers Squibb acquired its Hopewell campus in 1997 as a strategic investment to continue the discovery and development of new healthcare products and expand information

management technology. The company's commitment to protecting the environment is notably demonstrated at Bristol-Myers Squibb's Hopewell 433-acre campus, which offers one million square feet of laboratories, office space and computing facilities. The Hopewell campus embraces sustainability by rehabilitating a dormant facility, preserving farmland and open space, enhancing wetlands/riparian corridors, increasing wildlife habitat and enhancing aquifer recharge. In addition, the Hopewell campus uses an innovative watershed approach to environmental management, which recognizes the importance of water resources in the region and directs how the campus obtains, uses, treats, reuses, and ultimately discharges water.

Water Conservation Measures

As part of its watershed management approach the Hopewell campus has instituted various water conservation measures. Devices that are in place include a reclaimed water system, automatic shut-offs on bathroom sink faucets, aerators with flow restrictors on bathroom sink faucets, minimum capacity toilets, shut-off valves on hoses, low-flow shower heads, reduced volume laboratory glassware washing machines, high efficiency/low drift cooling towers, and various operational measures to decrease cooling loads especially during warm weather.

The most significant feature instituted at the campus is the reclaimed water system that was proactively constructed to conserve potable water by providing an additional source of non-potable water. This system enhances the sustainability of the campus watershed by minimizing withdrawal from ground or surface waters through the reuse of treated effluent from the onsite wastewater treatment plant to meet non-potable demands and reduces the amount of effluent discharged. Bristol-Myers Squibb Hopewell is currently authorized to reuse the effluent only for make-up water in cooling towers, which is classified as a beneficial reuse by the New Jersey Department of Environmental Protection (NJDEP), and is currently evaluating other non-potable uses such as reclaimed water for toilet flushing in new buildings. In 2004, 340,000 gallons of reclaimed water were supplied to the cooling towers, and the amount of reclaimed water has increased every year. In 2007, 6,200,000 gallons of reclaimed water were supplied which is equivalent to washing 124,262 loads of laundry or filling 327 average swimming pools. Reclaimed water use could increase to a yearly supply of up to 60,000,000 gallons at full campus build-out.

While NJDEP policy encourages alternative wastewater management techniques, including reclaimed water for beneficial reuse, reclaimed water systems are not regulatory requirements. The reclaimed water system also maximized efficiency by satisfying non-potable demand with lower quality reclaimed water and surface water, avoiding an increase in groundwater allocation and staying within the safe yield of the aquifer through ongoing campus expansion. Use of the watershed management approach at the Hopewell campus allows BMS to integrate its business goals with its commitment to the environment and promises more efficient resource use and stewardship of natural resources.

Biking and Walking Trail

Bristol-Myers Squibb's Hopewell campus is also the site of another effort with a positive environmental impact. In 2001, a group of community leaders convened by Bristol-Myers

Squibb met to address concerns about diminishing opportunities for safe, off-road biking and walking. State, county and local representatives of public bodies and several private organizations joined the group and an independent nonprofit organization, the Lawrence Hopewell Trail, was formed to investigate the possibility of constructing a biking and walking trail. This unique collaboration of government, business, the nonprofit sector, and residents has developed a strategic plan to manage construction and maintenance of the Lawrence Hopewell Trail and has already completed 6.5 miles of trail.

The Lawrence Hopewell Trail traces a rough circle through northwestern Lawrence Township and eastern Hopewell Township. Some of the destinations along the proposed route include Lawrenceville School, the Main Street district of Lawrenceville, Lawrence Township parks, Mercer County Northwest Park, Rosedale Park, Bristol-Myers Squibb research campus in Hopewell, and worldwide pharmaceutical headquarters in Lawrence, Hopewell Township open spaces, the Stony Brook-Millstone Watershed Association farmlands, and Educational Testing Service public green acres campus. In December of 2007, Bristol-Myers Squibb committed \$200,000 to the Lawrence Hopewell Trail to create a 24-space parking lot and complete another 0.5 mile section of the trail in the Dyson Tract in Lawrence Township.

There are numerous benefits to the trail, including opportunities for exercise and recreation and helping to reduce traffic congestion and providing opportunities for commuting. Wherever possible, the path will be off-road, constructed for multi-purpose use with a 10-foot width of pervious paving. In environmentally sensitive or historically significant areas, the path will narrow and may be constructed with crushed stone or other natural material. The NJ Department of Transportation endorses the Lawrence Hopewell Trail as part of a statewide commitment to alternative transportation and has funded a study to help with trail routing decisions. NJDOT consultants have calculated that almost 78,000 people live within an “easy reach” zone of the proposed trail.

Sustainability at Bristol-Myers Squibb’s Hopewell Campus

1. Substitution of Cooling Tower Additives ⇒ Heavy Metal Reduction

By switching additives in its cooling towers, the company reduced our discharge of heavy metals.

2. Reclaimed Water System ⇒ Water Use Reduction

Bristol-Myers Squibb Hopewell’s reclaimed water system conveys treated effluent from on-campus wastewater treatment plant to cooling towers for reuse, thereby reducing consumptive use of higher quality groundwater.

3. Toner Recycling Program ⇒ Waste Reduction

Toner cartridges from printers are returned to the manufacturers, refilled, and delivered back to Bristol-Myers Squibb for reuse, saving money and reducing waste. This program is a component of the company’s campus-wide recycling initiative.

4. Energy Team and Building Automation Systems ⇒ Energy Use Reduction

Bristol-Myers Squibb's Energy Team works with Hopewell's Campus Security to turn off lights and close fume hoods after hours and has initiated energy reduction initiatives. Combined with efforts at other regional Bristol-Myers Squibb campuses, the company's 2004 campaign to close unused fume hoods reduced energy by 5,800,000 kilowatt-hours and carbon dioxide emissions by more than 4 million pounds. This is equivalent to taking 371 cars off the road, planting 586 acres of trees, or powering 260 homes! Bristol-Myers Squibb also optimized its Building Automation System, which controls temperature, humidity and air flow to maintain comfortable building conditions during working hours and reduces energy use during evenings and weekends when the buildings are primarily vacant.

5. Marsh Hawk ⇔ Threatened or Endangered Species Protection

Across the globe, Bristol-Myers Squibb facilities have adopted different endangered or protected species as part of Bristol-Myers Squibb's commitment to protecting these animals and their habitats. The Hopewell Campus adopted the Marsh Hawk (Northern Harrier [Circus cyaneus]). Other land conservation and habitat improvement efforts on campus include stream restorations, bird box installation and monitoring, arboretum development, and brochure-guided walking trails focused on the campus watershed and wildlife.

To learn more about Bristol-Myers Squibb's sustainability, please visit www.bms.com/sustainability.