

Energizing EPA



A Model Employer: EPA Named One of the Best Workplaces for CommutersSM

EPA Headquarters employees are helping reduce air pollution and traffic congestion in the nation's capital by using alternative forms of transportation, making the Agency one of the best places to work in the Washington, DC metropolitan area.

On June 25, 2003, the Greater Washington Region's Best Workplaces for CommutersSM

Coalition recognized EPA Headquarters as one of the Greater Washington, DC Region's Best Workplaces for CommutersSM a mark of excellence for environmentally and employee-friendly workplaces.

Formerly the Commuter Choice Leadership Initiative, Best Workplaces for CommutersSM is a joint EPA Office of Transportation and Air Quality and Department of Transportation (DOT) voluntary program that recognizes organizations that offer employees outstanding commuter benefits, such as free or discounted transit passes, compressed work schedules, and telecommuting.

More than 2.2 million people commute each day in the Washington, DC metropolitan region, and more than 70 percent of them drive to work alone. This contributes to a decline in the region's air quality; for 38 days in 2002, air pollution levels in the Washington, DC Region violated federal health standards. Employers who participate in Best Workplaces for CommutersSM help improve the region's air quality by offering benefits that encourage employees to use alternative forms of transportation.

"EPA supports any initiative that promotes the reduction of air pollution and alleviates traffic congestion," said Melvin Joppy, Team Leader of the EPA's Facilities Operations and Transportation Management Branch and primary contact for EPA's involvement in Best Workplaces for CommutersSM.

To qualify as one of the Greater Washington Region's Best Workplaces for CommutersSM, EPA



Headquarters met a National Standard of Excellence in commuter benefits. As one of the Best Workplaces for CommutersSM, EPA provides employees with the following:

- A central point of contact for information, who actively informs employees of commuter benefits available.
- Access to a regional or employer-provided Guaranteed Ride Home (GRH) program.
- At least one primary commuter benefit, which can include a monthly transit/vanpool pass subsidy, cash in lieu of free parking, or a significant telecommuting program.
- At least three supporting commuter benefits, which can include carpool/vanpool incentives, lockers/showers for bikers or walkers, incentives for living near work, or onsite amenities such as day care or dry cleaning.

EPA Headquarters employees are eligible for a \$100-per-month transit subsidy, which can be used on Metrorail or any of the region's bus systems. Employees may also take advantage of many of the supporting benefits that are offered, such as bicycling and walking





Spreading the Word to Conserve Water in Labs

Laboratories use much more water than the average building; in fact, EPA laboratories use approximately 38,000 gallons of water per employee each year. EPA has made water conservation in its labs a high priority, in part to comply with Executive Order (EO) 13123, *Greening the Government Through Efficient Energy Management*. EO 13123 requires facilities to implement water management plans, report baseline water use, and employ best management practices (BMPs) in at least four of the following areas:

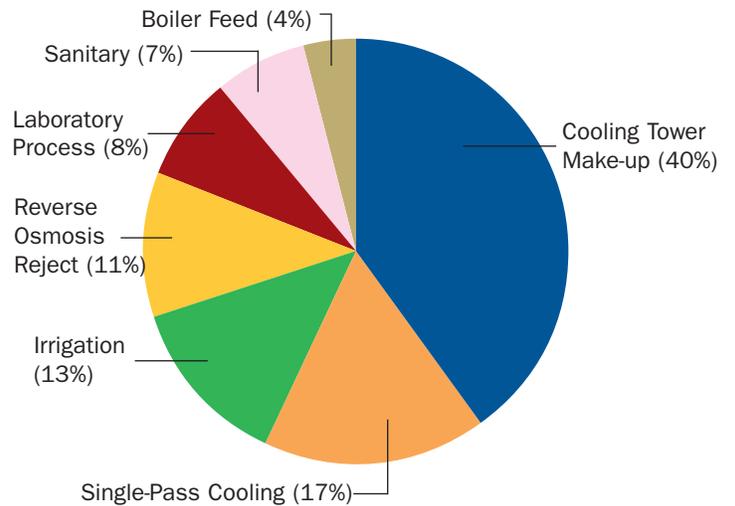
1. Public information and education programs
2. Distribution systems audits, leak detection and repair
3. Water-efficient landscape
4. Toilets and urinals
5. Faucets and showerheads
6. Boiler/steam systems
7. Single-pass cooling systems
8. Cooling tower systems
9. Miscellaneous high water-using processes
10. Water reuse and recycling

To help fulfill the first BMP—public information and education programs—EPA has created a new water conservation and management poster for all of its laboratories. The poster, which can be integrated into an existing educational program or provide a

Every Drop Counts

- One stuck toilet wastes more than 2,500 gallons of water each day.
- A low-flow faucet saves 5,000 gallons of water annually.
- Report leaks or malfunctioning water equipment to your facility manager.

Typical Laboratory Water Uses



foundation for a new educational program, summarizes EPA's commitment to water management, illustrates typical laboratory water use, and summarizes EO 13123 and its 10 BMPs. Lab employees can also learn from the poster how their actions make a difference. For instance, eliminating continuous flows of tap water to cool equipment can produce big results; one gallon per minute of continuous flow is enough water to supply the sanitary needs of 100 employees.

For more information on EPA's water conservation efforts, visit <www.epa.gov/greeningepa/water/index.htm>. To request a copy of the poster, contact Justin Spenillo of the Sustainable Facilities Practices Branch at 202 564-0639 or <spenillo.justin@epa.gov>.

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alternatives, priority subsidized parking for carpools and vanpools, and an Intranet-based carpool locator service. In addition, EPA annually co-sponsors a transportation fair promoting the use of mass transportation and alternative fuel vehicles.

EPA strongly considers location when looking for office space. Because of the convenient locations of EPA Headquarters buildings, employees have access to a wide variety of retail stores, restaurants, and dry cleaners, as well as easy access to public transportation. Convenient access to such amenities makes it easier for employees to use an alternative mode of transportation.

Best Workplaces for CommutersSM provides tools and guidance to help U.S. employers incorporate commuter benefits into their standard benefits plan, reap financial benefits, and gain national recognition. A coalition of leading government and business orga-

nizations focused on reducing traffic congestion, improving air quality, and making commuting less stressful and costly spearheaded the Best Workplaces for CommutersSM campaign in the Greater Washington Region: Commuter Connections, General Services Administration, Greater Washington Board of Trade, Metropolitan Washington Work/Life Coalition, National Capital Planning Commission, DOT, EPA, and the Washington Metropolitan Area Transit Authority.

For more information on the Greater Washington Region's Best Workplaces for CommutersSM, including EPA's participation, visit <www.bwc.gov> or contact Melvin Joppy at 202 564-6232 or <joppy.melvin@epa.gov>.



EPA Continues to Green Its Power Sources

As part of its ongoing commitment to purchasing green power, EPA recently added three facilities to the list of those who have “gone green” with renewable energy: the Region 2 Office in New York City; the Edison, New Jersey Region 2 Laboratory; and the Region 6 Laboratory in Houston, Texas. Green power, or renewable energy, reduces many of the harmful emissions associated with conventional fossil fueled power generation.

Getting Wind on the East Coast

The Region 2 Office, which serves New Jersey, New York, Puerto Rico, and the U.S. Virgin Islands, is the first EPA Regional Office in the country to meet all its electric needs from wind-generated power. Region 2 is now also the largest federal purchaser of clean wind energy in New York State.

“Switching to a non-polluting energy source for our office has a direct and positive impact on our mission to protect public health and the environment,” Regional Administrator Jane M. Kenny said. “We also hope the switch will inspire other agencies and offices to follow our lead and convert to wind power.”

Working with the U.S. General Services Administration (GSA), EPA began purchasing wind energy in June 2003 from the Fenner Wind Power Project. By switching to green power for the approximately 6.1 million kilowatt hours (kWh) of electricity it uses annually, the Region 2 Office is helping to eliminate more than 7 million pounds of carbon dioxide (CO₂) that would be emitted into the atmosphere each year. The CO₂ reduction is equivalent to the amount removed from the air by 450,000 trees or the amount emitted by cars driven 6.3 million miles annually. In addition, sulfur dioxide emissions will be reduced by an estimated 34,500 pounds and nitrogen oxides by 12,000 pounds annually.

Region 2 has also signed a contract to purchase green power for its Edison, New Jersey, Laboratory. Deliveries are scheduled to start in September 2003 and will total approximately 6 million kWhs.

Not Messing With Texas

EPA’s environmental laboratory in Houston recently entered into a three-year contract to provide 3.4 million kWh Renewable Energy Certificates (“green tags”) from 3 Phases Energy Services. The power purchased will be 100 percent wind energy from the 204-megawatt New Mexico Wind Energy Center. This is the most inexpensive wind power purchase that EPA has made to date costing slightly less than 1 cent per kWh more than conventional power.

The laboratory currently consumes more than 22 billion Btus annually and provides office and lab space in support of regional monitoring and criminal, civil, and enforcement activities.

Nationally, 10 percent of EPA’s electricity comes from renewable sources, which serve facilities in California, Colorado, Washington, Massachusetts, and Ohio. EPA’s Office of Air & Radiation developed the Green Power Partnership, a voluntary program that is working to make green power purchasing a common business practice. As an Agency, EPA is also a founding partner in this program.



Since the Green Power Partnership began in the summer of 2001, 117 organizations have committed to using green power for a total of 680 million kilowatt hours. Those purchases will help to remove 940 million pounds of CO₂ from the air, roughly the same amount absorbed by 130,000 acres of forest.

The Sustainable Facilities Practices Branch (SFPB) typically partners with a region or laboratory when it wants to acquire green power and sets up the procurement parameters. Parameters can include a preferred type of green power (i.e., wind, solar, geothermal) or a specific geographic area to be considered for green power sources. SFPB then uses GSA or the Defense Energy Supply Center’s contracting authority and expertise to procure the power. Contact SFPB at 202 564-2172 if you would like your facility to “Go Green” or visit <www.epa.gov/greeningepa> for more information on green power.





Putting a LID on Stormwater in the Chesapeake Bay Region

Erosion, urban flooding, sewer overflows, and increased levels of pollutants are just a few of the problems faced by local and regional watersheds as a result of rain.

Large amounts of stormwater runoff from heavy rainstorms can lead to major environmental concerns if not properly managed, especially in urban areas with large quantities of concrete and asphalt—materials that prevent water from being naturally absorbed and filtered through soil.

To address urban stormwater concerns and respond to an agreement approved by EPA in December 2001 to protect watersheds in the Chesapeake Bay region, EPA's Sustainable Facilities Practice Branch (SFPB) is working with the Office of Water's Non-Point Source Branch and the General Services Administration to implement Low Impact Development (LID) strategies at EPA's Federal Triangle complex in Washington, DC. These efforts will also help EPA meet water conservation goals outlined in Executive Order 13123 by reusing rainwater.

In addition to reducing environmental impacts from urban stormwater runoff, LID offers benefits such as simple integration into existing infrastructure, increased cost-effectiveness, and enhanced aesthetics when compared to more conventional stormwater management systems.

The Federal Triangle LID implementation plan uses a multi-faceted approach to achieve a reduction in peak runoff and pollutant loads. EPA's LID strategy focuses on several of the campus' courtyards. Plans call for the incorporation of native landscaping, coupled with an array of bioretention techniques, including bioretention cells, permeable pavers, and soil amendments (see box at right) designed to filter out pollutants as well as reduce stormwater runoff. In addition, EPA hopes to construct a green roof pavilion that will serve both a functional and educational role. The LID project will offer employees and visitors a first-hand look at some of EPA's innovative approaches to managing stormwater.

EPA hopes that by incorporating LID strategies into its Federal Triangle facilities, it can reduce the peak volume and pollutant load of stormwater runoff, thus reducing the environmental impact on the nearby Potomac and Anacostia River Watersheds. As part of the campus' multi-objective, multi-phased project, EPA plans on showcasing its LID practices—allowing local government, students, and visitors to observe and monitor creative solutions to urban stormwater management.

The Low-Down on LID

LID is a relatively new concept in stormwater management pioneered in Prince George's County, Maryland, in the early 1990s. LID encompasses a variety of innovative site design techniques aimed at controlling the volume and quality of stormwater runoff. LID techniques include:

- Bioretention—A soil and plant-based stormwater management system designed to mimic natural hydrological processes.
- Vegetated roof covers—Alternative to impervious rooftops that uses vegetation to retain and filter stormwater.
- Permeable pavements—Porous pavements that allow water to seep into the underlying soil, reducing runoff.
- Stormwater cisterns—Large storage tanks used to collect rainwater, typically paired with rain gutters that used to connect to storm sewer lines.
- Rain gutter disconnects—Rain gutters that have been disconnected from storm sewer lines, redirecting water into bioretention systems or cisterns.

EPA is currently finalizing its LID implementation designs for Phase 1—the Ariel Rios South courtyard and Constitution Avenue—and hopes to gain approval for the plan from the Commission of Fine Arts and the National Capital Planning Commission this Fall.

For more information about LID efforts at EPA's Federal Triangle complex, visit <www.epa.gov/greeningepa/water/stormwater.htm> or contact SFPB at 202 564-2172.

Laboratories for the 21st Century

2003 Annual Conference

Adam's Mark Denver Hotel,
Denver, Colorado

October 21–23, 2003



www.epa.gov/labs21century

"What the cathedral was to the 14th century, the laboratory is to the 21st century—it is the building type that embodies, in both program and technology, the spirit and culture of our age and attracts the greatest intellectual and economic resources of our society."

—Don Prowler
(1950–2002)

View from inside the
NREL Visitors' Center,
Golden, Colorado.