

PERFORMANCE
TRACK FIFTH ANNUAL
PROGRESS REPORT

Today's Commitments. Tomorrow's World.

Five years of environmental leadership



photo provided by Rockwell Collins

Front cover photo: Rockwell Collins' Manchester Operations facility in Manchester, Iowa, a Performance Track member since 2001, has established a wildlife habitat project on its property, providing nesting and habitat cover for wildlife while reducing runoff and erosion. The image is the winning entry in Performance Track's 2006 Cover Photo Contest. Photo Credit: Chris Bockenstedt, Rockwell Collins Manchester Operations.



TABLE OF CONTENTS

Executive Summary: Celebrating Five Years	3
Performance Track Basics	4
Highlights of Members' Results Reported in 2005	6
Results: A Look at Five Years of Performance Track	13
Pull-out poster: Reaching for a Brighter Future	15-18
Committing to Further Improvements	19
2007 Performance Awards	21
Connecting with the Community	24
Looking Back, Moving Forward	29



Executive Summary

CELEBRATING FIVE YEARS

Five years old and more than 400 members strong, EPA's National Environmental Performance Track program is leading the way toward a cleaner, safer environment. By encouraging facilities across the nation to do more for the environment than is required by law, Performance Track has emerged as a leader in a new generation of programs that recognize and drive environmental excellence. Performance Track was one of only 13 federal programs to be recognized in 2006 as a "Top-50 Innovation in American Government" by the Ash Institute for Democratic Governance and Innovation at Harvard University's John F. Kennedy School of Government.

Performance Track members include private and public facilities in 46 states and Puerto Rico representing virtually all manufacturing sectors, including those from major corporations and government agencies. The program also includes a wide range of facilities in non-manufacturing sectors such as tourism, research, education, and health care. Four companies—Baxter Healthcare Corporation, Johnson & Johnson, Rockwell Collins, and Xanterra Parks and Resorts—have been designated Performance Track Corporate Leaders to recognize their corporate-level commitment to environmental excellence and the participation of a substantial number of their facilities in Performance Track. Collectively, Performance Track members have reduced their water use by 3.5 billion gallons, conserved more than 14,000 acres of land, increased their use of recycled materials by 135,000 tons, reduced greenhouse gases by more than 97,000 tons, and smog-causing nitrogen oxides and sulfur dioxide by 6,000 and 17,000 tons respectively.

In addition, Performance Track members show the public that facilities in their community can be good citizens and responsible neighbors. The success of Performance Track members has helped spread the word about corporate environmental leadership.

As we step into the second half of this decade, Performance Track will continue to raise the bar. It will push itself and its members to become stronger environmental stewards—continuously improving environmental quality locally and nationally. By building a more rigorous program based on strong partnerships and goals, Performance Track will push member facilities to take leadership roles in their companies and their sectors and make the environmental commitments needed today to help shape a healthy environment for tomorrow. This report takes a step back to look at Performance Track's achievements over the past five years, the progress member facilities have made in their environmental commitments and their work with their communities, and the vision that Performance Track holds for the future.

Performance Track Program Accomplishments in 2006

- Performance Track members in all 10 EPA Regions can now take advantage of challenge commitments in air, water, and waste, helping EPA address national and regional priorities.
- Performance Track launched its five-year anniversary campaign, kicked off by EPA Administrator Stephen Johnson.
- Missouri signed a Memorandum of Agreement (MOA) with Performance Track, joining 11 other states that have signed agreements with the program.
- The program completed its second survey of members, with more than 71 percent of members responding.
- Performance Track had its second-most successful recruiting year ever, receiving 117 applications and accepting 87 members.
- EPA published a new rule under the Resource and Conservation Recovery Act reducing the frequency of self-inspections for eligible Performance Track members to once a month instead of daily or weekly.

1999

JULY — EPA publishes Aiming for Excellence, which contains a proposal to develop the National Environmental Performance Track.

2000

MARCH — EPA hosts two public meetings on Performance Track with various stakeholders in Washington, DC.

PERFORMANCE TRACK BASICS

Performance Track is a program that recognizes and encourages leading environmental performance among U.S. facilities of all types, sizes, and complexity, public and private. Any facility in the United States and its territories may apply for membership in Performance Track. To qualify for membership, facilities must demonstrate that they meet the following criteria:

Environmental Management System (EMS)

Applicants must have an EMS in place for at least one complete cycle, and their EMS must have undergone a comprehensive independent assessment. An EMS is a set of processes and practices that enable a facility to reduce its environmental impacts and increase its operating efficiency.

Sustained Compliance

Applicants must have a record of compliance with environmental laws and be in compliance with all applicable environmental requirements. They also must commit to maintain that level of compliance as long as they are a member of Performance Track.

Continuous Improvement

Applicants must commit to four quantitative goals (small facilities commit to two goals) for improving their environmental performance over the course of their three-year membership. Goals range from upstream improvements (such as improving environmental performance of suppliers) to downstream improvements (such as reducing a product's packaging or its lifetime energy use). See Figure 1 for the indicators that Performance Track members may choose from in setting their goals.

Public Outreach

Applicants must commit to remain involved and active in their communities, sharing their progress with the public and addressing any community concerns. Members complete an Annual Performance Report for each year of their membership, describing and quantifying to EPA and the public their progress toward their environmental goals during the previous year.

4

2000

APRIL — EPA hosts public meetings about Performance Track in Boston, MA, San Jose, CA, and Chicago, IL.

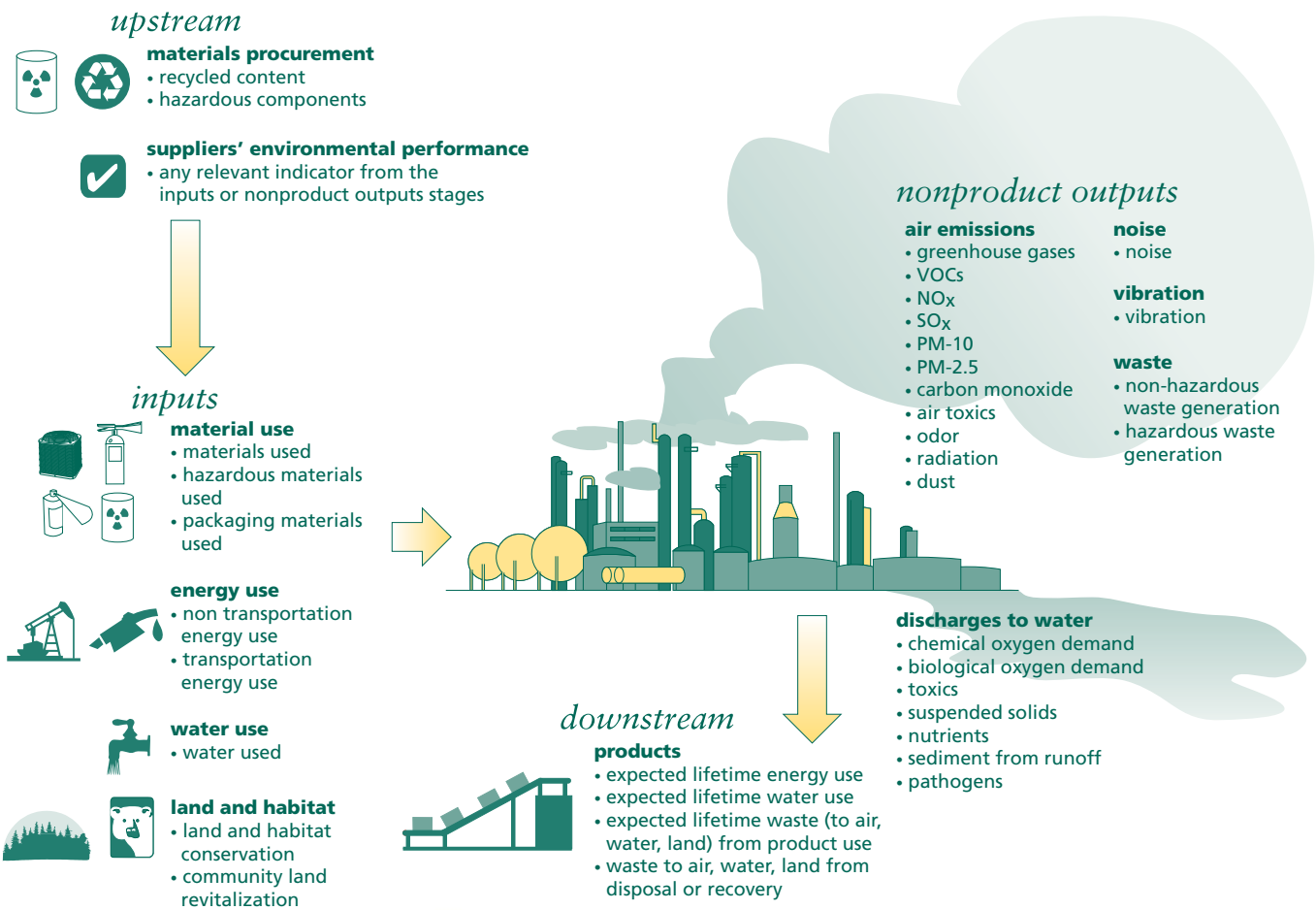
2000

MAY — Performance Track hosts first meeting with states in Denver, CO.

FIGURE 1

Performance Track Environmental Performance Indicators

Applicants to the program choose from among these indicators when setting their performance goals



2000 JUNE — Administrator Browner launches National Environmental Performance Track program.

2000 DECEMBER — EPA hosts ceremony recognizing 228 charter members of Performance Track.

HIGHLIGHTS OF MEMBERS' RESULTS REPORTED IN 2005

In 2006, Performance Track members reported on their environmental achievements during 2005. The main story these results tell is one of pollution prevention. Significant decreases in air pollutants, discharges to water, materials use, and the generation of waste demonstrate Performance Track members' strong commitment to a cleaner environment.

This report presents members' results both in absolute terms and in terms of "eco-efficiency," which describes reductions in environmental impact per unit of production or activity at a facility. To measure eco-efficiency, Performance Track members report improvements on a normalized basis, with normalization factors typically based on the number of units produced or the number of employees. In some cases, increases in production may cause a facility's environmental performance to decline in absolute terms (i.e., it may generate more waste, use more energy, or emit more pollution than it did before), but because it has taken steps to reduce its impact per unit of production its performance has improved in eco-efficiency terms. In cases such as this, presenting absolute results alone might imply that facilities had made no effort to improve their performance, whereas in fact they had avoided significant environmental impacts that would otherwise have occurred.

"I can say from personal experience at Rockwell Collins that Performance Track motivates people to behave differently. There is a reputation to live up to. Recognition causes people to strive for greater achievements."

Vicki Fisher
Enterprise ESH Manager,
Knowledge Management and System Evaluation
Rockwell Collins
Cedar Rapids, Iowa

Materials Use

Why it's important: Reducing the quantity of materials used in manufacturing and other activities helps conserve our natural resources. From aluminum to plastic, steel to paper, procuring and using materials affects the environment. Consider that manufacturing recycled paper uses only 26-45 percent of the energy needed to make virgin paper, and that making aluminum from recycled material uses 5 percent of the energy needed to make virgin aluminum.

What Performance Track facilities are doing: Collectively, the Performance Track facilities that made commitments in this area decreased their total materials use by 24,719 tons between 2004 and 2005. Forty-two out of the 61 facilities reporting on this indicator showed eco-efficiency improvements, avoiding the use of 53,523 tons of materials. In addition, Performance Track facilities reduced their use of toxic materials by 4,365 tons and their use of packaging by 109 tons, and increased their use of recycled materials by 16,258 tons, all in absolute terms.

6

2000

DECEMBER — Performance Track Network is initiated as a forum for Performance Track to collaborate with national trade associations, nongovernmental organizations, and other professional organizations.

2001

APRIL — Group of charter members forms the Performance Track Participants' Association (PTPA).

Water Use

Why it's important: Reducing water use decreases the need to withdraw ground or surface water supplies, thus maintaining the health of aquatic environments and preserving water resources so they are available during times of drought.

What Performance Track facilities are doing:

In 2005, Performance Track facilities reduced their water consumption by nearly 1.7 billion gallons in absolute terms—enough to meet the annual water needs of 58,000 homes. This accomplishment can be attributed to an effort by facilities to increase their efficiency of water use. For example, Stora Enso North America Duluth Paper Mill and Recycled Pulp Mill (Duluth, Minnesota) installed equipment that allows the facility to reuse processed water rather than draw on limited fresh water supplies.

Energy Use

Why it's important: Most of the energy in the United States is generated from fossil fuels such as coal, natural gas, and oil. These energy sources are the nation's dominant source of air emissions, including global warming-causing greenhouse gases.

What Performance Track facilities are doing: Energy is a driving force behind the U.S. economy. However, even as the national economy grew, total energy use reported by Performance Track members decreased by 4,268,554 MMBTU—equivalent to the annual energy use of 46,000 homes. In addition, many members increased their use of energy produced by renewable sources, resulting in lower emissions of air pollutants and greenhouse gases.

SPOTLIGHT ON JANSSEN PHARMACEUTICA



Photo courtesy of Janssen Pharmaceutica

Janssen Pharmaceutica, a testing facility for the development of prescription pharmaceuticals, has undertaken impressive energy efficiency and renewable energy ventures, along with a number of other environmental initiatives that bring its environmental performance well beyond regulatory compliance. In its commitment to reduce total facility energy use,

the facility has installed the third largest system of solar photovoltaics in the United States and brought the site into conformity with ENERGY STAR Best Practices. Janssen is distinguished as a river-friendly business by a local watershed organization and received a Silver Certificate in 2004 from the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) program for existing buildings. The facility has educated and rewarded employees for their environmental protection efforts and has reached out to the community to promote environmental awareness. Janssen also has restored 40.25 acres of its 270-acre Titusville, New Jersey, landscape acreage to native grasses, wildflowers, and no-mow zones.

2002 FEBRUARY — Texas Natural Resource Conservation Commission signs first MOA with Performance Track.

2002 MARCH — EPA awards Performance Track program Silver Medal of Commendation.

IMPROVING PERFORMANCE BUSINESS CASE

Hewlett-Packard Caribe (Aguadilla, Puerto Rico) nets \$1 million annually through an onsite company that helps the facility find additional opportunities to recycle and reuse wastes. The facility diverts 85 percent of its solid waste from the landfill.

Land and Habitat Conservation

Why it's important: Preserving local ecosystems is vital to both the preservation of native flora and fauna and the creation of livable communities and healthy economies. The process of promoting local land and habitat conservation projects joins public and private stakeholders around a common goal, creating a stronger community and environment.

What Performance Track facilities are doing: In 2005, 46 Performance Track facilities conserved 5,267 acres of land. Many facilities, such as McNeil PPC's facility in Lititz, Pennsylvania, not only protected land for future generations but also improved habitat and made land accessible for community education and recreation.

Emissions of Greenhouse Gases

Why they're important: Greenhouse gases, such as carbon dioxide, methane, nitrous oxide, and ground-level ozone, are causing the Earth's atmosphere to warm, leading to changes in climate. Climate change is expected to have many adverse effects on human health, natural ecosystems, and the global economy.

What Performance Track facilities are doing: Performance Track facilities reporting on this indicator reduced their greenhouse gas emissions both in absolute terms (31,541 metric tons of carbon dioxide equivalent reduced, enough to offset the annual greenhouse gas emissions of 7,000 cars) and in eco-efficiency terms (avoiding 108,024 metric tons, equivalent to the annual emissions of 23,000 cars). These results show significant improvement from last year when Performance Track members reduced greenhouse gas emissions by 3,933 metric tons of carbon dioxide equivalent in absolute terms and avoided 66,147 metric tons of carbon dioxide equivalent through eco-efficiency measures.

8

2002

APRIL — Office of Enforcement and Compliance Assurance issues memorandum affirming low priority for routine EPA inspections benefit to Performance Track members.

2002

APRIL — Administrator Whitman kicks off second annual event for Performance Track members and signs MOAs with Colorado, Massachusetts, and Virginia.

TABLE 1

Performance Track Members' Results in 2005

Category	Indicator	Absolute improvements made in 2005 ¹	Number of members reporting ²	Impacts avoided through eco-efficiency in 2005 (based on normalized results) ³	Number of members reporting normalized improvements
Materials Procurement	Hazardous/toxic components	12.6 tons	9	17.5 tons	6
Materials Use	Materials use	24,719 tons	61	53,523 tons	42
	Hazardous materials use	4,365 tons	75	400 tons	56
	Ozone-depleting substances	(27.5) tons	6	(27.9) tons	4
	Total packaging materials used	109 tons	8	229 tons	6
	Use of reused/recycled materials	16,258 tons	40	NA	NA
Water Use	Total water use	1,686,935,166 gallons	154	1,241,536,114 gallons	105
Energy Use	Energy use (non-transportation)	4,268,554 MMBTU	187	3,651,918 MMBTU	129
	Transportation energy use	45,747 gallons	12	143,138 gallons	8
Land and Habitat	Land and habitat conservation	5,267 acres	46	NA	NA
Air Emissions	Greenhouse gases	31,540 MTCO ₂ E	45	108,024 MTCO ₂ E	35
	Volatile organic compounds (VOCs)	493 tons	56	391 tons	45
	Air toxics	70 tons	19	65 tons	11
	Carbon monoxide	0.15 tons	3	0.08 tons	1
	Nitrogen oxides (NO _x)	579 tons	21	324 tons	13
	Ozone-depleting gases	0 tons	2	0 tons	1
	Particulate matter (PM-10, PM-2.5)	58 tons	8	23 tons	6
	Sulfur oxides (SO _x)	(341) tons	10	(272) tons	6
	Radiation	(541) Curies	1	3,627 Curies	1
Waste	Non-hazardous waste generation	48,210 tons	223	92,827 tons	127
	Hazardous waste generation	124,371 tons	129	85,700 tons	82
Discharges to Water	Discharges of BOD, COD, TSS, nutrients, sediments to water	15,260 tons	24	15,671 tons	13
	Discharges of toxics to water	1,691 tons	15	824 tons	7
Noise	Noise	97 dBa	12	NA	NA
Product	Expected lifetime waste (to air, water, land) from product use	483 tons	3	477 tons	3
	Waste to air, water, land from disposal	(16.88) tons	1	1.71 tons	1

Numbers shown in red represent a decline in performance
Table footnotes and caveats on next page

2002

APRIL — Performance Track signs first MOA with another federal agency program (OSHA's VPP).

2003

JANUARY — During the program's first two years, members reduced their water use by a cumulative total of 775 million gallons, solid waste by 176,126 tons, and greenhouse gases by 40,193 tons.

Footnotes

1. Represents the difference between actual quantities in 2004 and 2005.
2. These numbers represent the number of members included in the analysis rather than the total number of members that have made commitments under each indicator. Approximately 13 percent of members' results are not included in the analysis because their 2005 Annual Performance Reports were not finalized by the cut-off date or the data did not meet EPA's reporting standards.
3. "Avoidance" is the difference between the actual quantity of an indicator in 2005 and the quantity that would have resulted if the facilities had not implemented any improvements. It is calculated by multiplying the 2004 level of environmental performance by a factor that represents the change in economic activity between 2004 and 2005, and then subtracting the actual level of performance in 2005. The accuracy of the avoidance figures depends on both the accuracy of the reported actual results and the reported 2004 and 2005 normalizing factors. Normalizing is an inexact science. Normalizing factors often tell an incomplete story about changes in production in a facility, and they often fail to explain fully the causes of environmental pollution or resource consumption.

Key to abbreviations: MMBTU=million British thermal units; MTCO₂E=metric tons of carbon dioxide equivalent; BOD=biochemical oxygen demand; COD=chemical oxygen demand; TSS=total suspended solids; dBA=decibels (acoustic).

Caveats to the 2005 and Cumulative Results

1. Data are reported by member facilities.
2. Although EPA asks for exact figures, some facilities submit rounded data. The accuracy of the avoidance figures depends on both the accuracy of the reported actual results and the reported 2004 and 2005 normalizing factors. Normalizing is an inexact science. Normalizing factors often tell an incomplete story about changes in production in a facility, and they often fail to explain fully the causes of environmental pollution or resource consumption.
3. Although most member facilities' commitments are facility-wide, a few members (less than 10 percent) have based their current commitments on a specific process rather than on the facility as a whole. For example, a facility may have committed to reducing its VOC emissions from a particular production line by 50 percent. While such process-specific results are excluded from the aggregate results whenever possible, the 2005 data in this report likely include a small percentage of process-specific results. EPA began requiring facility-wide data in 2004; therefore, the cumulative results likely include data that are not facility-wide.
4. Similarly, facilities' commitments may relate to one "component" of an environmental indicator rather than to the indicator as a whole. For example, a facility may commit to reducing one particular waste stream or one particular toxic air emission rather than to reducing its total solid waste or all releases of toxic chemicals. The parameters of each facility's commitments may be determined by viewing its application and/or annual performance reports at www.epa.gov/performance-track/particip.
5. The baseline year for members that entered the program in 2002 is 2000. Their results actually represent changes occurring over a two-year period.
6. Energy results discussed in the text are only from commitments related to non-transportation energy use.

Emissions of Volatile Organic Compounds (VOCs)

Why they're important: Volatile organic compounds (VOCs) are precursors to ground-level ozone and are emitted as gases from a wide array of products, from paints to glues and adhesives. VOCs include a variety of chemicals, some of which may have short- and long-term adverse health effects, including eye, nose, and throat irritation; headaches, loss of coordination, and nausea; and damage to the liver, kidneys, and central nervous system.

What Performance Track facilities are doing: Eighty percent of the Performance Track facilities reporting on emissions of VOCs showed eco-efficiency improvements in this area in 2005, and members reporting on this area collectively reduced their VOC emissions in absolute terms by a total of 493 tons.

Emissions of Nitrogen Oxides

Why they're important: Nitrogen oxides (NO_x) are a group of highly reactive gases, all of which contain nitrogen and oxygen in varying amounts. NO_x emissions contribute to a host of environmental and health impacts. For example, NO_x emissions in the air can lead to increased nitrogen loading in water bodies, particularly coastal estuaries, which upsets the chemical balance of nutrients used by aquatic plants and animals. Additional nitrogen leads to oxygen depletion and reduces fish and shellfish populations. NO_x emissions also contribute to a number of air quality problems such as smog, acid rain, ground-level ozone, and climate change.

What Performance Track facilities are doing: In 2005, 13 of the 21 Performance Track facilities that committed to reducing NO_x emissions made eco-efficiency improvements, and members reporting on this indicator achieved an absolute reduction of 579 tons.

Emissions of Sulfur Dioxide

Why it's important: Sulfur dioxide (SO₂) contributes to respiratory illness, particularly in children and the elderly, and aggravates existing heart and lung diseases. It also contributes to the formation of acid rain, which damages aquatic organisms, trees, crops, and historic buildings.

What Performance Track facilities are doing: Sixty percent of Performance Track members reporting on this indicator reduced their SO₂ emissions in 2005. However, in the aggregate, these facilities increased their emissions by 341 tons due to large increases by a few facilities. These increases were driven primarily by higher diesel consumption required to meet increased production needs.

Emissions of Particulate Matter (PM-10, PM-2.5)

Why it's important: Exposure to particulate matter can aggravate lung disease, causing asthma attacks and respiratory infections. Particulate matter also can make lakes and streams acidic, change the nutrient balance in coastal waters and large river basins, deplete nutrients in soil, damage sensitive forests and farm crops, and affect the diversity of ecosystems.

What Performance Track facilities are doing: Seventy-five percent of the members reporting on their emissions of particulate matter made improvements in this area in 2005, resulting in an overall reduction of 58 tons in absolute terms.

2004

JANUARY — During the program's first three years, members reduced their water use by 1.3 billion gallons, solid waste by 582,213 tons, and energy use by more than 8.4 trillion BTU.

2004

FEBRUARY — Performance Track adds criterion requiring facilities to have their environmental management system independently assessed.

Waste Generation

Why it's important: Even when disposed of properly, toxic and non-toxic waste can pose a serious threat to human health and the environment. The transportation, processing, storage, and disposal of waste all have unintended impacts on air, water, and habitat quality.

What Performance Track facilities are doing: In 2005, Performance Track members reporting on this area collectively avoided the generation of 124,371 tons of hazardous waste from their facilities. In addition, 223 facilities reported on their efforts to reduce their non-hazardous waste, the largest number of facilities reporting on any indicator. These efforts resulted in a reported reduction of 48,210 tons of non-hazardous waste in absolute terms and 92,827 tons in eco-efficiency terms.

“As a corporation, one of our major objectives is to be a ‘best citizen.’ Performance Track is very well aligned with this goal and gives us the tracking mechanisms and indicators so that we are sure, on a continuous basis, that we are indeed a best citizen for our communities.”

Eladio Alvarez
Plant Manager
Baxter Healthcare Corporation
of Puerto Rico, Jayuya Facility
Jayuya, Puerto Rico

Discharges to Water

Why they're important: The pollution of our water resources can have wide-ranging effects on the environment and human health. Pollution adversely affects fish and other animals, disrupts ecosystems, and causes a reduction in biodiversity. Ultimately, these effects can take their toll on human life. Drinking water sources become contaminated, causing sickness and disease.

What Performance Track facilities are doing: In 2005, Performance Track members reporting on discharges to water reduced biochemical oxygen demand (BOD), chemical oxygen demand, total suspended solids, nutrients, and sediments into water by 15,260 tons in absolute terms. They also reduced discharges of toxics into water by 1,691 tons. Coca-Cola's facility in Columbus, Ohio installed a new wastewater treatment plant that reduced its total BOD discharges by nearly 97 percent.

Results

A LOOK AT FIVE YEARS OF PERFORMANCE TRACK

During the past five years, Performance Track has grown significantly in terms of membership; partnerships formed with states, other agencies, and trade organizations; and the environmental improvements achieved by members. However, the progress hasn't always been either steady or positive. Performance in several key indicators, such as materials use, has declined in aggregate numbers both in actual and eco-efficiency terms.

Still, Performance Track members lead their peers in terms of their willingness to be transparent to the world about their progress on the more than 1,500 voluntary commitments they have made to the environment. The program encourages members to set ambitious goals that they will have to "stretch" to achieve, with the result that not all members reach them. Furthermore, members may miss their goals for reasons they cannot control. The parent company may decide to shift more production to a Performance Track facility, requiring the facility to use more energy and materials. Or demand for products manufactured by a Performance Track facility may suddenly increase. Conversely, financial constraints may force some facilities to delay plans for environmental improvements.

The program's aggregate annual results for the past five years, shown on the following pull-out pages, provide a benchmark against which future achievements may be compared. They demonstrate the annual environmental improvements (and in some cases declines in performance) that Performance Track facilities have realized to date.

Please note that the graphs on the pull-out pages represent actual, rather than normalized results, and thus do not take into account improvements in eco-efficiency.

Performance Track By the Numbers (as of December 2006)

3 The number of years that Performance Track members have to continuously improve upon their environmental goals once they are accepted into the program.

15 The percentage of Performance Track facilities owned by Performance Track Corporate Leaders. EPA offers Performance Track Corporate Leader recognition to companies with a corporate-wide commitment to above-and-beyond environmental performance and that have multiple facilities in Performance Track. Current Performance Track Corporate Leaders include Baxter Healthcare Corporation, Johnson & Johnson, Rockwell Collins, and Xanterra Parks and Resorts.

IMPROVING PERFORMANCE BUSINESS CASE

Rohm and Haas Electronic Materials

(Marlborough, Massachusetts) replaced seven burner control sections with high-efficiency motor controllers. The project will generate approximately \$49,000 in cost savings per year while reducing annual energy use by about 3.7 billion BTU.

2004 JULY — Performance Track issues first comprehensive member satisfaction survey.

2004 JULY — EPA announces Corporate Leader designation within Performance Track.

IMPROVING PERFORMANCE BUSINESS CASE

Baxter Healthcare Corporation, a Performance Track Corporate Leader, saved \$8 million in 2005 by adopting new technologies to reduce its energy use—and associated greenhouse gas emissions—by 6 percent per unit of production, compared with 2004 levels. Baxter saved another \$6.9 million in 2005 by reducing its generation of non-hazardous waste, and \$3.5 million by reducing product packaging.

47 The number of states and territories that have Performance Track facilities.

129 The number of facilities that reduced their energy consumption in 2005.

470 The current number of Performance Track members.

1,500 The number of commitments to the environment made by Performance Track members.

2005 The year in which Performance Track became institutionalized in the national budgeting and accountability system.

6,339 The number of tons of NO_x emissions members have collectively reduced.

20,000 The number of tons by which current members have committed to reduce their discharges into water.

33,000 The number of acres of land that current members have pledged to set aside for conservation.

97,000 The number of metric tons by which carbon dioxide equivalent has been reduced to date by members.

124,371 The number of tons of hazardous waste generation reduced by Performance Track members.

715,000 The number of tons by which current members have pledged to reduce their hazardous and non-hazardous waste.

5.2 billion The number of gallons by which current members have pledged to reduce their water use.

Committing to FURTHER IMPROVEMENTS

Performance Track requires applicants and members to demonstrate a commitment to continuous environmental improvement by implementing policies and systems that go beyond their legal requirements. Approximately 87 percent of Performance Track members commit to reducing their generation of solid and hazardous waste, 70 percent commit to reducing harmful air emissions, 65 percent commit to reducing energy use, over 50 percent commit to reducing materials use, and almost 50 percent of members commit to reducing water use. The following table provides a summary of current member commitments received through August 2006.

TABLE 2
Summary of member commitments received through August 2006

Categories and Indicators	Number of Members with Goals ¹	Projected Annual Improvement by Year 3 of Membership ²
STAGE 1: UPSTREAM		
Materials Procurement		
Recycled content	36	10,177 tons (increase)
Hazardous components	12	846 tons
Suppliers' Environmental Performance		
Packaging materials	1	56 tons
STAGE 2: INPUTS		
Material Use		
Materials used	65	156,558 tons
Hazardous materials used	78	8,596 tons
Ozone-depleting substances	7	230,549 CFC-11 equivalent pounds
Packaging materials used	11	1,097 tons
Recycled content	6	60,758 tons (increase)
Energy Use		
Non-transportation energy use	204	7,269,584 MMBTU
Transportation energy use	15	89,638 gallons
Water Use		
Water used	184	5,218,538,607 gallons
Land and Habitat		
Land and habitat conservation	49	33,213 acres (increase)

2004

DECEMBER — Performance Track is featured in trade journals and other publications reaching an audience of more than 2 million people in 2004.

2005

JANUARY — Since the program's inception, members have collectively reduced their water use by nearly 1.9 billion gallons, conserved close to 9,000 acres of land, and increased their use of recycled materials by nearly 120,000 tons.

Categories and Indicators	Number of Members with Goals ¹	Projected Annual Improvement by Year 3 of Membership ²
STAGE 3: NONPRODUCT OUTPUTS		
Air Emissions		
Greenhouse gases	46	88,289 MTCO ₂ E
Volatile organic compounds	57	821 tons
Air toxics	22	139 tons
Nitrogen oxides	17	1,202 tons
Particulate matter (PM-10, PM-2.5)	9	316 tons
Sulfur oxides	6	118 tons
Carbon monoxide	2	39 tons
Radiation	1	1,117 Curies
Discharges to Water		
Toxics	13	1,077 tons
Suspended solids	10	16,630 tons
Biochemical oxygen demand (BOD)	9	1,966 tons
Nutrients	3	17 tons
Sediment from runoff	3	302 tons
Chemical oxygen demand	1	28 tons
Waste		
Non-hazardous waste	225	579,473 tons
Hazardous waste	124	135,655 tons
Noise		
Noise	14	216 dBA
STAGE 4: DOWNSTREAM		
Products		
Expected lifetime waste (to air, water, land)	2	169 tons
Waste to air, water, land from disposal or recovery	1	0.7 tons

1. Values shown in this column represent the number of members whose goals for an indicator were included in the calculations for projected reductions. Some goals were excluded from the calculations due to missing or nonstandard data.

2. The Performance Track membership includes facilities whose terms expire in different years. For facilities accepted into the program in 2003, for example, "Year 3" of their membership is 2006, whereas for those accepted in 2004 "Year 3" is 2007.

2007

PERFORMANCE AWARDS

Performance Track recognizes all members for their outstanding commitment to continuous environmental improvement, but the program provides special recognition to a select few facilities each year in honor of their superior achievements. Performance Track's 2007 Environmental Performance Awards recognize members that have demonstrated exemplary environmental performance during their participation in the program, particularly during the 2005 calendar year. The principal evaluation criteria for this award were progress made toward performance goals and the breadth and challenge level of the member's performance commitments. This evaluation was supplemented with consideration of the member's annual performance report quality, compliance history, and community outreach efforts.

LARGE FACILITY CATEGORY

McNeil PPC Lititz, Pennsylvania

As a leading manufacturer of consumer healthcare products, McNeil PPC's mission is to discover and develop breakthrough medicines to help people live longer, healthier lives. Also on McNeil's to-do list is becoming a global leader in corporate responsibility. As a charter member of Performance Track, McNeil's facility in Lititz, Pennsylvania (formerly owned by Pfizer), is doing just that. By 2006, the facility had replaced all equipment containing ozone-depleting CFC refrigerants with less harmful models using HFC refrigerants.

Between 2003 and 2005, despite a 5 percent increase in production, the plant managed to reduce its annual energy use by 7,000 million BTU—a 6-percent decrease. At the same time, the facility reduced its water use by 24 percent, thanks to a hot-loop system that uses high-temperature water to kill bacteria, thereby eliminating the need for purging spent process water. McNeil PPC also improved its condensate recovery system with the installation of new flash tanks, pumps, traps, and high-pressure de-aeration equipment. Modifications in the distribution system and controls for purified water increased the life of filters, thus reducing the volume of water discharged to drains. And by adopting longer production cycles, the plant reduced the number of changeovers and cleanings required for tanks, piping, and vessels.

Since 2003, the plant has reduced sediment runoff to the Chesapeake Bay by 178 tons per year and reduced annual discharges of nitrogen and phosphorous by 1.9 tons. McNeil PPC also was a key partner in a restoration project in the Lititz Run Watershed, which involved restoring a 900-

2005 **APRIL** — EPA incorporates Performance Track into its planning, budget, and accountability system for headquarters and regions.

2005 **APRIL** — Performance Track joins forces with the Performance Track Participants' Association, the National Pollution Prevention Roundtable, and the Compliance Assistance Providers' Forum to form the National Environmental Partnership Summit in Chicago, IL.

foot stream corridor and floodplain adjacent to the McNeil site. Specifically, the project entailed cutting a new stream channel, removing more than 7,000 tons of soil from the area, and stabilizing the stream banks using native plants and grasses. For its continued environmental efforts and community outreach, Performance Track is pleased to recognize McNeil PPC with its second Performance Award.

Siltronic Corporation Portland, Oregon

From computers and mobile phones to airbags and aircraft control systems, hundreds of 21st-century products rely on microchips to function. Portland, Oregon-based Siltronic Corporation is a leading manufacturer of ultra-pure silicon wafers, which form the heart of micro- and nanoelectronics. A charter member of Performance Track, Siltronic continues to make calculated investments in research, development, and testing aimed at improving its environmental performance and its bottom line.

For example, in 2004 the company implemented a program to reuse nitric acid and also reduced the volume of nitric acid required for its manufacturing processes. As a result, between 2003 and 2005, the facility reduced its annual discharges of nitric acid by 172 tons, showing a 53 percent improvement. Siltronic committed to improving its water use efficiency by 8 percent between 2003 and 2006. But by 2005, the facility far exceeded that goal, achieving a 33 percent improvement in water use efficiency. How? The trick was to reuse process water in scrubbers and to keep drain lines clear. Similarly, Siltronic's investments in developing and testing a system to reclaim wire saw slurry resulted in a 15 percent efficiency improvement in the use of slurry. Finally, despite a 32 percent increase in production between 2003 and 2005, Siltronic reduced its total annual energy use by more than 38 billion BTU by implementing several measures to conserve electricity and natural gas.

DENSO Manufacturing Michigan, Inc. Battle Creek, Michigan

DENSO Manufacturing Michigan, Inc., (DMMI) designs and produces automotive heating and cooling components and systems. Located on an 85-acre site in Battle Creek, MI, the facility houses more than 1 million square feet of manufacturing and administrative floor space. A charter member of Performance Track, DMMI clocked environmental improvements across the board in 2005.

DMMI generated nearly 1,780 fewer tons of solid waste in 2005 than it did in 2003, an achievement tied to minimizing aluminum scraps and increasing the use of returnable containers, rather than one-time-use packaging. Process enhancements virtually eliminated DMMI's use of hexavalent chromium, a known carcinogen. With regard to greenhouse gas emissions, DMMI implemented improved process controls to recover heat from exhausts and to reduce utility consumption during lulls in production. As a result, the facility reduced its per-unit emissions by 6 percent compared to its 2003 baseline.

Through process improvements in the cooling towers and production wash baths, DMMI also reduced its water consumption by 14.5 million gallons between 2003 and 2005, a 28 percent reduction. And DMMI continues to support Battle Creek's Wellhead Protection Program, a state-funded initiative that helps communities safeguard public water supply systems and protect groundwater from contamination.

SMALL FACILITY CATEGORY

Montenay Bay LLC Panama City, Florida

For a small, 37-person facility, Montenay Bay LLC is making a big impact with its environmental performance. At its waste-to-energy facility in Panama City, Florida, Montenay Bay processes 500 tons of solid waste per day, producing about 13 megawatts of electricity per hour—enough to power 10,683 homes for a year. In 2005, the facility reduced its particulate matter emissions by 15 tons, representing a 40 percent reduction, through a new system of controls, including spray dryer absorbers, baghouses, carbon injection systems, and lime slurry injection systems. The facility also improved its water use efficiency by 16 percent by reusing water from the boiler building to supply the water needs of the ash conveyors. In addition, the scrubber for its new air pollution control equipment reuses water from the cooling tower, further reducing the plant's draw from well water.

Montenay Bay's efforts reach beyond the plant into the community, where the Panama City facility actively promotes environmental awareness through efforts such as hosting an environmental fair in Bay County. And in 2005, the facility opened a new onsite drop-off center that includes receptacles where citizens can dispose of used oil, old appliances, and non-burnable materials.

2005 **SEPTEMBER** — Performance Track launches first national challenge commitment.

2005 **DECEMBER** — Performance Track is profiled in articles reaching a circulation of more than 2 million readers in 2005.

2006 **FEBRUARY** — 400th member facility is accepted into Performance Track.

Connecting WITH THE COMMUNITY

One of the criteria for membership in Performance Track is that facilities must remain involved and active in their communities, sharing their accomplishments with the public and addressing community concerns. The two stories that follow are examples of the important and lasting contributions that Performance Track members have made in connecting with their communities.

COLONIAL ACRES GOLF COURSE GLENMONT, NEW YORK

The Facility

Colonial Acres Golf Course is located in the hamlet of Glenmont, New York. The first golf course to be accepted into Performance Track, Colonial Acres immediately set a high bar by taking on three goals instead of the two required for small facilities. Through its Performance Track commitments, Colonial Acres has so far reduced its energy consumption by almost 8 percent, its application of synthetic pesticides and fertilizers by 18 percent, and its generation of waste by more than 42 percent in eco-efficiency terms.



Photo courtesy of Colonial Acres Golf Course

The golf course is maintained by using predominately organic-based fertilizers—such as bone and feather meal or composted turkey droppings—rather than synthetic compounds. Natural organisms are used to help reduce stress on the grass, suppress disease, and improve plant performance during drought. The least toxic of synthetic pesticides are used. All of the water used to irrigate the course comes from ponds that

catch runoff. No streams, rivers, or wells are tapped. Still, one of the course's future Performance Track commitments is to reduce total energy use by improving the watering system and wetting agent applications to reduce the amount of time irrigation pumps run.

Colonial Acres took its first step toward better understanding pollution prevention in 1998 by joining Audubon International's Cooperative Sanctuary Program for Golf Courses, which provides environmental education and conservation assistance to golf course superintendents and industry professionals. Then in 2000, Colonial Acres received the New York Governor's Award for Pollution Prevention by a small business. In 2004 it became the first facility of its kind to join

Performance Track. “I give a lot of credit to Performance Track, which helped us understand the potential we had to reduce the negative impact we could be making on the environment,” says Patrick Blum, the course superintendent. “Once we got the hang of it, we just kept raising the bar to get better and better.”

The Community

The Lishakill Softball Complex is just down the road from the Colonial Acres Golf Course and hosts more than 300 softball players. In 2006, the complex joined Colonial Acres in Audubon International’s Cooperative Sanctuary Program. With direction and support from Colonial Acres staff, the softball complex was able to stay on budget while pursuing better environmental performance. “The lessons we have learned and the knowledge we have gained from being a Performance Track facility allowed us to walk the softball complex through an environmental certification process and have it designated as an environmental sanctuary,” says Blum. “This process was a team effort in every sense. We really couldn’t have done it without the help of a handful of dedicated girls from the softball teams.”



Photo courtesy of Colonial Acres Golf Course

The complex includes five softball fields, a 1,500-square-foot concession stand and a number of parking lots. Completed in 2004, the 26-acre complex contains important wetlands for native flora and fauna. The property is home to 13 different species of birds, including wild turkeys, red-tailed hawks, eastern bluebirds, wood ducks, and redwing blackbirds; 12 species of mammals, including deer, squirrels, raccoons, and rabbits; and a number of species of turtles and frogs. An integrated design allowed the complex to be built while keeping the existing wetlands intact.

The People

Blum became involved with the softball facility’s environmental improvement efforts when his daughter began playing softball there. With his help, the complex began implementing a rigorous recycling program and worked with the town to institute a recycling hauling system. It uses energy-efficient lighting, low-flow faucets, and organic biocompost fertilizers instead of synthetic ones. The facility staff recently installed bluebird boxes and conducted a wildlife inventory on the property.

2006

APRIL — Administrator Johnson presents the 2006 Performance Track Corporate Leader designation to Xanterra Parks and Resorts before a crowd of 400 attendees at the Performance Track Annual Awards Ceremony in Atlanta, GA.

2006

APRIL — Forty-nine Performance Track facilities have selected challenge commitments; Performance Track has partnered with the Offices of Air, Water, and Waste, and six EPA regions to offer national and regional challenge commitments.

While Blum's efforts were paramount in getting the Lishakill complex certified in the Audubon program, the real impetus came from his 10-year-old daughter, Samantha. The father-daughter team enlisted support from teammates, parents, and local government. The facility's board of directors, led by Colleen Delay, was especially supportive of the project. "It's not just about softball," says Delay, "it's about the girls' environmental future."

According to Blum, "the only thing better than watching more than 300 girls playing softball is when they stop in the middle of the game and start yelling, 'There go the wild turkeys.'" For Blum, the personal rewards were well worth the time invested in achieving certification. "When you take a recreational activity like softball and know that the girls are playing on an environmental sanctuary, it makes it the best game in town."

Blum continues to pursue efforts to take the lessons he learned at the golf course and share them with whomever will listen. He recently helped his children's school develop a butterfly garden and a nature path with bluebird boxes, and also advised the school on ways to improve its energy efficiency, which led to certification in Audubon International's program. He also has helped neighbors and friends reduce water consumption and fertilizer use on their lawns, while maintaining quality. "When people ask me why I put in all the effort I do, I say the same thing: Someway, somehow I want to improve my son's and daughter's future. Everybody has to step up in the way they can. I am going to continue to do what I can in the way I know best: turf."

BRIDGESTONE/FIRESTONE **WILSON, NORTH CAROLINA**

The Facility

Bridgestone Firestone's Wilson Plant opened its doors in 1973 and produced its first tire on March 1, 1974. Since then, environmental quality and community involvement have been hallmarks of the plant. With just over 1,900 full-time employees, referred to as teammates throughout the company, the plant is the largest manufacturing employer and power user in Wilson, North Carolina. An ISO 14001 facility, the Wilson plant sets itself apart by fostering the involvement of all its teammates in improving environmental quality. Programs such as annual mandatory environmental awareness trainings provide employees with the knowledge they need to help improve environmental quality at the plant, and an active volunteer program ensures that employees participate in activities designed to improve the environment in the surrounding community.

In the spring of 2006, the Wilson plant joined Performance Track with the goal of targeting solid waste, energy consumption, and water use. In keeping with the Wilson tradition, the plant's membership in Performance Track is not based on a top-down mandate, but instead engages employees in enhancing processes and systems to improve the plant's environmental performance.

"Our teammates realize that we all have to excel in the environmental aspects of our jobs to achieve excellent results," says Jim Pridgen, plant manager. "As we improve our environmental performance we're also enhancing our efficiency, which is crucial to keeping our plant globally competitive. We're proud of our achievements, and all of our Wilson teammates are committed to continuous improvement and we will continue to work hard and build on our environmental success."

The Community

This past Earth Day, the plant dedicated its Freedom Wildlife Habitat and Refuge—a 350-acre preserve enhanced for native wildlife, the Wilson community, and future generations. The habitat is composed of forested areas, natural open areas, and two ponds. It will support a variety of plant and animal species as well as serve as an asset to the Wilson County community.

The plant has already designated more than 50 projects to improve the refuge in the coming years, including building nature and hiking trails, enhancing ponds and waterways, and creating nesting programs for native birds. Other ideas, such as wild turkey and quail releases, tree and plant identification, and brush pile construction, are also being developed as part of a comprehensive wildlife management plan. A 25-member volunteer team—a comprehensive cross-section of teammates, retirees, and outside groups—meets weekly to plan the habitat's future.

The People

Dave Mahan, an employee at the Wilson plant, was an Eagle Scout and holds the Silver Beaver—one of the highest awards in scouting. His youth was filled with scouting, camping, and summer outdoor education jobs. As an adult he did not leave these interests behind. Rather, he instilled in his own children a similar love for the outdoors, and has worked with youth across the country to promote the values of good stewardship.



Photo courtesy of Bridgestone/Firestone

When Mahan moved to Wilson in May 2004, he immediately looked to share his love for the outdoors with the next generation, becoming active in the East Carolina Boy Scout Council. In this capacity he created Troop #806, composed of young men from disadvantaged homes. Under Mahan's leadership, Troop #806 has become an integral partner in creating the Freedom Wildlife Refuge. "The refuge is more than just protected habitat," Mahan says. "It represents a commitment from the company, the facility, and the teammates to the future generation."



Photo courtesy of Bridgestone/Firestone

According to Mahan, the refuge provides a place that fosters an environmental commitment for "our kids and kids like those in Troop #806 who might otherwise not get the chance to develop a love for the outdoors."

In keeping with its commitment to promote environmental initiatives and involvement in the community, the company presented Mahan with the 2005 Bridgestone Humanitarian of the Year Award. Beyond the public thanks and recognition, Bridgestone awarded him \$1,000 to be contributed to his favorite charity. Mahan contributed the money as an endowment to the East Carolina Scout Council to ensure that kids like those in Troop #806 would continue to explore and work to preserve the landscape of eastern North Carolina.

The Freedom Wildlife Habitat and Refuge was a product of the hard work of many individuals. From CEO Mark Emke's commitment to make community service and the environment a part of his yearly management policy, to the time and effort Dave Mahan's coworker Bert Lamm spent using his own equipment to install interpretive signs, the Freedom Wildlife Refuge was truly a team project.

"Without the teamwork that was involved and the public commitment we made to the environment through Performance Track, the Freedom Wildlife Refuge would never have become a reality," says Plant Manager Jim Pridgen.

Looking Back

MOVING FORWARD

Recognizing and Driving Environmental Excellence

When EPA launched the National Environmental Performance Track program in June 2000, it was with the intent of complementing the Agency's traditional regulatory strategy with a more positive, incentive-based approach. There was no doubt that regulation was essential to EPA's mission. Thirty years of regulation and enforcement had resulted in cleaner air, cleaner water, and a better quality of life for all Americans. But it had become clear that the standards and limits set by regulation could only accomplish so much. What if EPA and its state counterparts could identify facilities that were doing well and encourage them to do better? Could we achieve even stronger environmental results?

Performance Track was created to recognize and drive environmental excellence. A core principle of the program is that facilities with a strong environmental record that are willing to transparently commit to goals for further improvement should be recognized for their leadership. Putting this principle into action meant changing, in some ways, how EPA did business. It expanded EPA's role from adversarial watchdog to partner and collaborator. It also meant introducing limited regulatory and administrative flexibility for facilities with a proven commitment to environmental excellence, reducing some of the reporting burden and other transaction costs that are designed mainly for poorer performers.

Performance Track's goals and principles have resonated strongly with state governments. When EPA launched the program, only a handful of states were implementing similar initiatives. By the end of 2006, nearly 20 states had adopted programs with goals and designs comparable—and in some cases nearly identical—to those of Performance Track.

“We're very proud of our Environmental Management System. Joining Performance Track allows us to demonstrate our environmental performance to others, and to continue to go above and beyond regulatory compliance.”

Rick Rupert
Senior Environmental Engineer
PRO-TEC Coating Company
Leipsic, Ohio

Five Years of Learning

Like its members, EPA's Performance Track operates in a spirit of continuous improvement. During our five years of experience, we have incorporated what we have learned into the program's design. For example:

- From our site visits at member facilities, we learned that the members whose EMS had not been assessed by a qualified, independent party were more likely to show deficiencies than members that had undergone such an assessment. To address this issue, Performance Track modified its entry criteria in early 2004 to stipulate that all applicants must go through a process for independently assessing their EMSs. The result is that the quality of applicants' management systems has steadily improved.
- From our colleagues at EPA and state environmental agencies, we learned that members' commitments for improved performance could be focused more on addressing regional or national priorities. In response to this opportunity, EPA now encourages members to adopt "challenge commitments" for addressing priority issues at a defined level of performance. We now have 49 facilities implementing regional or national challenge commitments on such priorities as energy efficiency, water use, and releases of priority contaminants.
- As our membership grew, we observed that several major companies had made substantial, long-term commitments to Performance Track and its goals. Not only had they earned acceptance into the program for a number of their operating facilities, but they were demonstrating environmental leadership at the corporate level as well. Starting in 2004, we engaged these companies by challenging them to meet criteria for designation as Performance Track Corporate Leaders. Among the qualifying criteria are robust corporate management of environmental issues, demonstrated performance improvements and commitment to further progress, working with suppliers and customers to improve their performance, and a strong overall compliance record. So far, four companies have qualified: Baxter Healthcare Corporation, Johnson & Johnson, Rockwell Collins, and Xanterra Parks and Resorts. These firms have committed to significant reductions in greenhouse gases, waste, and chemical use; to more effective supply chain management; to improvements in water and energy efficiency; and other goals. They are publicly committing, at a corporate level, to achieve results that we hope will serve as a model for other organizations.

Fulfilling Our Vision

By collaborating more effectively, building partnerships, measuring results more systematically, and creating opportunities for more learning and sharing of information, Performance Track and its state counterparts aim to transform the way that government and industry address environmental issues and solve problems. This is the program's long-term vision.

To fulfill this vision, EPA and the states plan to pursue the following activities in the years ahead:

- Continue to build the environmental and business cases for incorporating performance into regulatory strategies, and enhance those strategies by recognizing and encouraging leadership. Organizations do better than the law requires for many reasons: they want to be more efficient, respond to customers, appeal to investors, differentiate themselves from competitors, and build stronger relationships with communities and government. There is growing evidence that facilities and companies accomplish more when government provides positive incentives to reinforce the effects of these other factors.
- Expand membership in Performance Track and state programs in order to shift the performance curve. EPA and states will continue their efforts to attract leading companies, government agencies, and other organizations. The more organizations that are engaged in the search for continuous improvement, the more we can achieve in terms of environmental results and effective partnerships. As highly visible leadership companies such as Baxter Healthcare Corporation, Johnson & Johnson, 3M, Xerox, Intel, and DuPont demonstrate the value of participation, their efforts will encourage others to improve. The long-term goal is not only to reinforce what these companies are doing but to move the performance curve to achieve better results and more effective environmental management.
- Demonstrate its potential for addressing high-priority environmental problems. Through such initiatives as challenge commitments, partnerships focused on specific environmental problems, and better sharing of leading practices, EPA and program members—in cooperation with state programs—plan to focus on key issues that the current system may not fully address.
- EPA has initiated a dialogue with nongovernmental organizations to fulfill the promise of Performance Track and state programs as a prototype for devising effective solutions to pressing problems.

We're proud of what Performance Track and its members have accomplished in the past five years, and we're excited about the opportunities that lie ahead. Please join us in our journey as we work to instill a new way of thinking about environmental protection, one that encourages everyone to do their best, where "good enough" is never, in fact, good enough.

Dan Fiorino
Director of Performance Track

NOTES



NOTES





National
Environmental
Performance Track

Office of Policy, Economics,
and Innovation (MC 1807-T)
EPA 100-R-07-004
www.epa.gov/performance-track
March 2007



Recycled/Recyclable
Printed with Vegetable Oil Based Inks on Recycled Paper
(Minimum 50% Postconsumer) Process Chlorine Free