

Environmental Protection Agency

FY 2003 Annual Performance Plan and Congressional Justification

Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

Strategic Goal: Pollution prevention and risk management strategies aimed at eliminating, reducing, or minimizing emissions and contamination will result in cleaner and safer environments in which all Americans can reside, work and enjoy life. EPA will safeguard ecosystems and promote the health of natural communities that are integral to the quality of life in this nation.

Resource Summary (Dollars in thousands)

	FY 2001 Actuals	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems	\$305,072.6	\$321,649.7	\$326,651.9	\$5,002.2
Reduce Public and Ecosystem Risk from Pesticides	\$54,262.3	\$56,026.3	\$55,409.8	(\$616.5)
Reduce Risks from Lead and Other Toxic Chemicals	\$33,927.9	\$36,423.5	\$36,355.9	(\$67.6)
Manage New Chemical Introduction and Screen Existing Chemicals for Risk	\$69,315.0	\$75,337.8	\$77,538.2	\$2,200.4
Ensure Healthier Indoor Air.	\$39,190.4	\$39,670.1	\$40,322.7	\$652.6
Facilitate Prevention, Reduction and Recycling of PBTs and Toxic Chemicals	\$41,723.8	\$48,755.4	\$46,115.9	(\$2,639.5)
Assess Conditions in Indian Country	\$66,653.2	\$65,436.6	\$70,909.4	\$5,472.8
Total Workyears	1,131.2	1,208.2	1,193.9	-14.3

Background and Context

The underlying principle of the activities in this goal is the application of pollution prevention. Preventing pollution before it may harm the environment or public is cheaper and smarter than costly cleanup and remediation. EPA uses a number of approaches to protect public health and the nation's ecosystems from the risks of exposure to pesticides and/or toxic chemicals.

While EPA continues to implement "the reasonable certainty of no harm" standard mandated by the FQPA in its regulatory decisions, it also works with pesticide users on adopting less toxic methods of pest management that reduce or eliminate toxic pesticides entering indoor and outdoor environments.

Regarding industrial emissions of toxic chemicals, in 1999 Toxics Release Inventory (TRI) facilities reported a total of 10.2 billion pounds of pollutants released, treated or combusted for energy. Reducing waste, and reducing the toxic chemicals that are used in industrial processing, protects the environment and also improves efficiency, thereby lowering costs for industry.

Pollution prevention involves changing the behavior of those that generate the pollution and fostering the wider use of preventive practices as a means to achieve cost effective, sustainable results. For example, the Design for the Environment and Green Chemistry programs strive to change the behavior of chemists and engineers to incorporate pollution prevention and environmental risk considerations in their daily work. The Strategic Agricultural Partnership Initiative and the Pesticide Environmental Stewardship Program cooperate with USDA, states, and non-governmental organizations to demonstrate with farmers integrated pest management strategies that reduce pesticide residues in the environment.

In Goal 4, the Agency targets certain chemicals of high risk as well as the full range of pollutants addressed by the pollution prevention program. Many chemicals are particularly toxic to children. For instance, at high levels, lead damages the brain and nervous system and can result in behavioral and learning problems in children. Despite a dramatic reduction in lead exposure among young children over the last twenty years, there were still approximately 900,000 children in the U.S. with elevated blood lead levels in the early 1990's. Evidence from recent State surveys suggests that EPA and other government programs made important progress in the mid- to late 1990's in further combating lead poisoning in children under the age of 6 years (though updated national estimates are still in development). On other fronts, exposure to asbestos, polychlorinated biphenyls (PCBs) and some pesticides in our buildings and in the environment poses risks to humans as well as wildlife. Pesticides and chemicals that may act as endocrine disruptors at ambient levels is an area of increased concern for human health and the environment. For other common chemicals, risks may not be known. The screening and testing of chemicals about to enter the market, combined with the review of the most common chemicals already in use through the Chemical Right-to-Know Program, fills critical gaps in our knowledge about the effects of chemicals on human health and the environment.

Means and Strategy

The diversity and sensitivity of America's environments (communities, homes, workplaces and ecosystems) requires EPA to adopt a multi-faceted approach to protecting the public from the threats posed by pesticides, toxic chemicals and other pollutants. The underlying principle of the activities in this goal is the application of pollution prevention practices, which can be cheaper and smarter than cleanup and remediation, as evidenced by the high cost of Superfund, Resource Conservation and Recovery Act (RCRA), and Polychlorinated Biphenyls (PCB) cleanups. Pollution Prevention (P2) involves changing the behavior of those that cause the pollution and fostering the wider use of preventive practices as a means to achieve effective, sustainable results.

Under this Goal, EPA ensures that pesticides and their application methods do not present unreasonable risks to human health, the environment, and ecosystems. In addition to the array of

risk-management measures specified in the registration authorities under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) for individual pesticide ingredients, EPA has specific programs to foster worker and pesticide-user safety, ground-water protection, and the safe use of pesticides and other pest control methods. These programs work to ensure the comprehensive protection of the environment and wildlife, endangered species in particular, and to reduce the contribution of pesticides to ecological threats such as pollutant loading in select geographic areas. EPA is also addressing emerging threats such as endocrine disruptors by developing and implementing new screening technologies to assess a chemical's impact on hormonal activity.

Within the pesticide program, EPA pursues a variety of field activities at the regional, state, Tribal and local levels, including the promotion of pesticide environmental stewardship and Integrated Pest Management (IPM). States and Tribes are vital partners in our work to implement FQPA. Newer lab equipment will assist states enforcement of new FQPA standards. The voluntary partnerships and outreach programs that help farmers transition away from the riskier products are often catalyzed by state participation. These programs, combined with the availability of newer and safer pesticides, are having a real impact. In 2003 we expect at least 6 percent of acre-treatments will use applications of reduced-risk pesticides. We are seeing a reduction in wildlife impacts from pesticides as well, and in 2003 we project an additional 10 percent reduction in reported incidents of wildlife mortalities, from the 1995 level (for a cumulative 20 percent). That means fewer bird casualties, and fewer fish kills. The accumulation of these improvements will mean safer food, improved biodiversity, and a cleaner environment.

The Agency remains committed to safeguarding our Nation's communities, homes, workplaces and ecosystems. Preventing pollution through regulatory, voluntary, and partnership actions -- educating and changing the behavior of the public -- is a sensible and effective approach to sustainable development while protecting our nation's health. Two groups with significant potential to effect environmental change are industry and academia. The Agency has successfully pursued a number of pollution prevention programs with both of these groups. Likewise, improved understanding of the potential risks to health from airborne toxic chemicals present indoors will strengthen our ability to reduce residents' exposure through voluntary changes in behavior and through potential product reformulation.

Preventing pollution through partnerships is also central to EPA's Chemical Right-to-Know Program (ChemRTK) which has already started providing the public with information on the basic health and environmental effects of the 2,800 highest production volume (HPV) chemicals in the United States (chemicals manufactured in or imported into the U.S. in quantities of at least 1 million pounds). Most residents come into daily contact with many of these chemicals, yet relatively little is known about their potential impacts. Getting basic hazard testing information on large volume chemicals is the focus of the "HPV Challenge Program," a voluntary program challenging industry to develop chemical hazard data that are critical to enable EPA, State, Tribes, and the public to screen chemicals already in commerce for any risks they may be posing.

Children's health remains a strong focus of the indoor environments program. Efforts in FY 2003 will target reductions in the presence of indoor triggers of asthma, such as

environmental tobacco smoke and biological contaminants, by continuing to educate the public about the disease and about the steps they can take to reduce the severity and frequency of asthma attacks. Voluntary work will be undertaken by schools to empower their students to manage their asthma symptoms better, by school personnel to improve the indoor environments of their schools, and by health care personnel to incorporate education about managing environmental asthma triggers into asthma treatment plans for their patients. EPA will continue to work toward bottom line results to reduce risk and improve indoor air quality through implementation of the Indoor Air Quality (IAQ) “Tools for Schools” kit and schools-based asthma education programs such as the “Open Airways” program in elementary schools. EPA will also continue work in the radon area primarily through the State Indoor Radon Grant Program where EPA provides assistance to the states for the development and implementation of programs to assess and mitigate radon to enhance the effectiveness of state and local activities for radon risk management and reduction.

Also central to the Agency’s work under this goal in FY 2003 will be continued attention to reducing potential risk from persistent, bioaccumulative and highly toxic chemicals (PBTs) and from chemicals that have endocrine disruption effects. PBT chemicals are of particular concern not only because they are toxic but also because they may remain in the environment for a long period of time, are not readily destroyed, and may build up or accumulate to high concentrations in plant or animal tissue. In cases involving mercury and PCBs, they may accumulate in human tissue. EPA is also taking the initial steps to address the potential threat of endocrine disrupting chemicals on the health of humans and wildlife. Work focuses on developing and validating new chemical screens and tests to isolate those chemicals and characterize the threat.

EPA programs under this Goal have many indirect effects that significantly augment the stream of benefits they provide. For example, each year the Toxic Substances Control Act (TSCA) New Chemicals program reviews and manages the potential risks from approximately 1,800 new chemicals and 40 products of biotechnology that enter the marketplace. This new chemical review process not only protects the public from the possible immediate threats of harmful chemicals, like PCBs, from entering the marketplace, but it has also contributed to changing the behavior of the chemical industry, making industry more aware and responsible for the impact these chemicals have on human health and the environment. This awareness has led industry to produce safer “greener” alternative chemicals and pesticides. Under the Pollution Prevention Framework, the Agency recently started providing industry training in the use of the same tools that EPA uses to assess new chemicals, enabling companies to make smarter choices at earlier stages in their design process, reducing government costs, and hastening the entry of safer new products into the marketplace.

The Design for the Environment (DfE), Green Chemistry Program and Green Engineering (GE) build on and expand new chemistry efforts. They target industry and academia to maximize pollution prevention. Our DfE Program forms partnerships with industry to find sensible solutions to prevent pollution. In one example, taking a sector approach, EPA has worked with the electronics industry to reduce the use of formaldehyde and other toxic chemicals in the manufacture of printed wiring boards. Our Green Chemistry Program also forms partnerships with industry and the scientific community to find economically viable

technical solutions to prevent pollution. In addition, the Green Engineering Program works with the American Society of Engineering Education (ASEE) to incorporate GE approaches into engineering curricula.

In several cases, achieving the strategic objectives under this goal is a shared responsibility with other federal, state and Tribal partners. For example, EPA's role in reducing the levels of childrens lead exposure involves promotion of federal-state-Tribe partnerships to decrease the number of specific sources of lead to children, primarily from addressing lead-based paint hazards. These partnerships emphasize development of a professional infrastructure to identify, manage and abate lead-based paint hazards, as well as public education and empowerment strategies, which fit into companion Federal efforts with Department of Health and Human Services (HHS), Department of Defense (DOD), Department of Energy (DOE), Department of Justice (DOJ), Centers for Disease Control (CDC), and Department of Housing and Urban Development (HUD). These combined efforts help to monitor lead levels in the environment, with the intent of virtually eliminating lead poisoning in children.

Intrinsic to the effort to prevent pollution is the minimization of the quantities of waste generated by the public, industry, government agencies, and hazardous-waste management operations. Strategies range from fostering materials reuse and recycling and other resource-recovery processes to broad-based campaigns to re-engineer the consumption and use of raw materials or personal conservation of resources. Effective and sustainable programs reduce the need for storage, treatment or disposal of hazardous or municipal wastes, while reducing costs to industry and municipalities.

In FY 2003, EPA's waste management program will increase consumer and individual awareness of environmental issues by focusing on an environmental retail theme. This will emphasize a retail outreach approach targeted at consumers and households. EPA's environmental retail theme promotes better environmental decision-making, greater interest in the environment, and environmental stewardship on the manufacturing level.

Since this Goal focuses on how the public lives in communities, it features the Agency's commitment of fulfilling its responsibility for assuring human health and promoting environmental protection in Indian Country. EPA's policy is to work with Tribes on a government-to-government basis that affirms the vital trust responsibility that EPA has with 572 Tribal governments and remain cognizant of the Nation's interest in conserving the cultural uses of natural resources.

Research

Currently, there are significant gaps with regard to the understanding of actual human and ecological exposures to pesticides and toxic substances. To address those data gaps, this research will provide a strategic framework for developing an integrated suite of tools and models that will enhance EPA's procedures for assessing the risks to human health and ecological systems associated with commercial chemicals, microorganisms, and genetically modified organisms.

Strategic Objectives and FY 2003 Annual Performance Goals

Reduce Public and Ecosystem Risk from Pesticides

- Reduce by 20 percent from 1995 levels the number of incidents involving mortalities to terrestrial and aquatic wildlife caused by pesticides.

Reduce Risks from Lead and Other Toxic Chemicals

- Reduce lead exposure in housing units and in the deleading of bridges and structures.

Manage New Chemical Introduction and Screen Existing Chemicals for Risk

- Of the approx. 1,800 application new chemical and microorganisms submitted by industry, ensure those marketed are safe for humans and the environment. Increase proportion of commercial chemical that have undergone PMN review to signify they are properly managed and may be potential green alternative to existing chemical.
- Provide information and analytical tools to the public for assessing the risks posed by toxic chemicals.

Ensure Healthier Indoor Air

- 834,400 additional people will be living in healthier residential indoor environments.
- 1,050,000 students, faculty and staff will experience improved indoor air quality in their schools.

Facilitate Prevention, Reduction and Recycling of PBTs and Toxic Chemicals

- The quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery in 2003, (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2002. This data will be reported in 2005.
- Divert an additional 1% (for a cumulative total of 32% or 74 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day.

Assess Conditions in Indian Country

- In 2003, AIEO will evaluate non-Federal sources of environmental data pertaining to conditions in Indian Country to enrich the Tribal Baseline Assessment Project.

Highlights

EPA seeks to prevent pollution at the source as the first choice in managing environmental risks to humans and ecosystems. Where pollution prevention at the source is not a viable alternative, the Agency will employ risk management and cost effective remediation strategies. Reducing pollution at the source will be carried out using a multi-media approach in the following environmental problem areas:

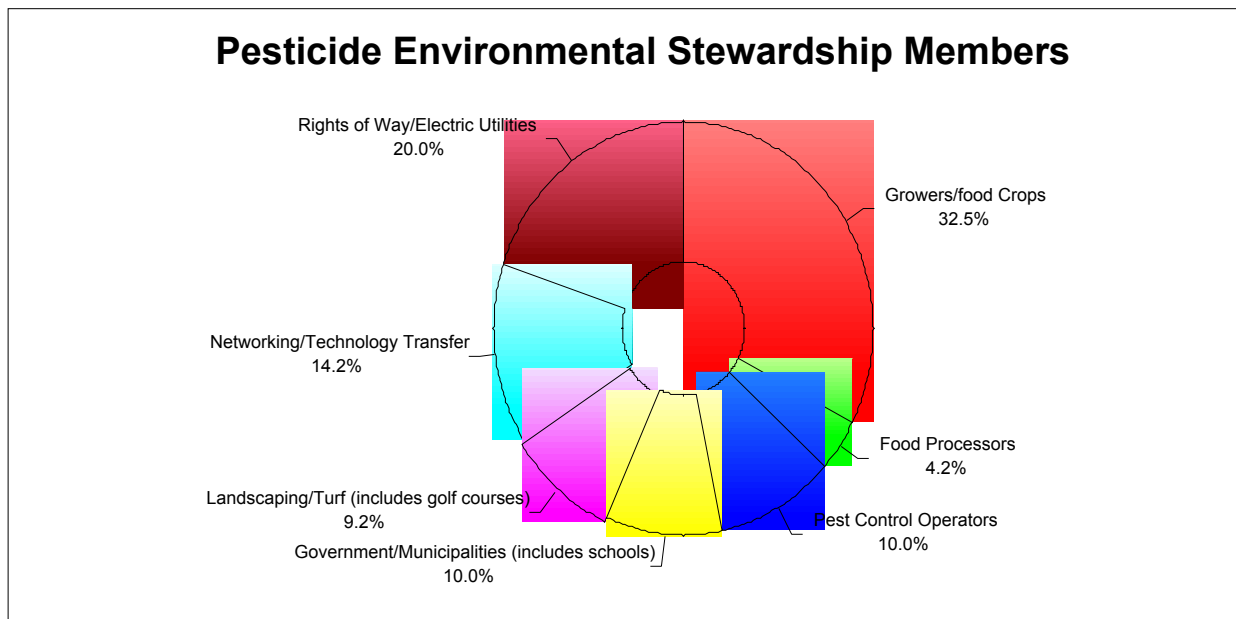
Reduce Public and Ecosystem Risks from Pesticides

Reducing risk from exposure to pesticides requires a multi-faceted approach. Beyond being exposed through the food we eat, the general public, applicators, and farm workers may be exposed to pesticides through direct handling, groundwater contamination or aerial spray. One intent of the Food Quality Protection Act (FQPA) is to protect the public by shifting the nation toward reduced risk pesticides and safer pesticide use. Appropriate transition strategies to reduced risk pesticides are important to the nation to avoid disruption of food supply or sudden changes in the market that could result from abruptly terminating the use of a pesticide before well-targeted reduced risk equivalents can be identified and made available. In 2003, the initiative will continue efforts to reach more farmers, and grower groups, encourage them to adopt safer pesticides, use environmental stewardship and integrated pest management practices, and adopt a “whole farm” approach to environmental protection. Through these partnership programs the Agency has become more aware of the multiple pressures on our nation’s agricultural industry and the interaction of the various environmental requirements that affect it.

Additionally, through the Certification and Training (C&T) and Worker Protection (WP) programs, EPA will continue training and educating farm workers and employers on worker safety practices and the dangers of pesticides. EPA will continue to protect the Nation’s ecosystems and reduce adverse impacts to endangered species through various regulatory and voluntary programs, including the Pesticide Environmental Stewardship Program (PESP) and integrated pest management (IPM). The Agency will emphasize efforts with our Tribal partners to address pesticide issues and enhance the development of Tribal technical capacity, particularly in the areas of risk management, worker safety, training, and pollution prevention.

Together, the WP and the C&T programs address issues of safe pesticide use and pesticide exposure. These programs emphasize safeguarding workers and other pesticide users from occupational exposure to pesticides by providing training for workers, employers, and pesticide applicators and handlers. Training and certification of applicators of restricted use pesticides further ensures that workers and other vulnerable groups are protected from undue pesticide exposure and risk. Recertification requirements keep their knowledge current with label changes, application improvements, availability of new pesticides and other pesticide related issues. The Endangered Species program will enlist the support of the agricultural community and other interested groups to protect wildlife and critical habitats from pesticides. This voluntary program is carried out through communications and outreach efforts and in coordination with other federal agencies. The Pesticide Environmental Stewardship Program (PESP) and Integrated Pest Management (IPM) play pivotal roles in moving the nation to the use of safe pest control methods, including reduced risk pesticides. These closely related programs

promote risk reduction through collaborative efforts with stakeholders to use safer alternatives to traditional chemical methods of pest control.



Antimicrobial sterilants and disinfectants are used to kill microorganisms on surfaces and objects in hospitals, schools, restaurants and homes. Antimicrobials require appropriate labeling and handling to ensure safety and efficacy. EPA remains focused on accurate product labeling and product efficacy and meeting other requirements for antimicrobial sterilants set forth by FQPA, as well as the reregistration of older antimicrobials to ensure they meet today's standards.

Reduce Risks from Lead and Other Toxic Chemicals

EPA is part of the Federal effort to address lead poisoning and elevated blood levels in children by assisting in, and in some cases guiding, federal activities aimed at reducing the exposure of children in homes with lead-based paint. During FY 2003, EPA will continue implementing its comprehensive program to reduce the incidence of lead poisoning and elevated blood levels in children nationwide.

In 2003, EPA will continue the Lead Based Paint Training & Certification Program in all fifty states through EPA authorized state, territorial or Tribal programs or, in states and territories without EPA authorization, through direct implementation by the Agency. By the end of 2003, we expect to have provided the nation with more than 6,000 individuals and firms formally certified in properly abating lead paint hazards. In the lead regulatory program, EPA will finalize one major rule on training and certification for renovation and remodeling activities. We will also be working to finalize a major rule setting standard for deleading of buildings and structures, which will be proposed late in 2002.

EPA will continue to implement the new Lead Hazards Standards Rule (finalized in 2001), the Lead Renovation Information Rule and the Real Estate Notification & Disclosure Rule. EPA is working with other Federal Agencies including Department of Health and Human

Serviced (HHS), Department of Housing and Urban Development (HUD), Department of Defense (DOD), Department of Energy (DOE), Consumer Product Safety Commission (CPSC), and Department of Justice (DOJ) on implementing a Federal Strategy to virtually eliminate lead poisoning.

For other chemicals whose significant risks are well established (such as PCBs, asbestos, and dioxin), reductions in use and releases are important to reducing exposure of the general population as well as sensitive sub-populations. In FY 2003, EPA's PCB control efforts will encourage phase-out of PCB electrical equipment, ensuring proper waste disposal methods and capacity, and fostering PCB site cleanups. 660,000,000 Kg of bulk PCB-contaminate waste will be safely disposed of in 2003. The Agency will continue assessing dioxin risks, including identifying and quantifying the link between dioxin sources and the general population exposure, and development of a plans to develop an dioxin strategy to respond to the latest science and address dioxin risk management in a more comprehensive cross-media approach.

Manage New Chemical Introduction and Screen Existing Chemicals for Risk

Under TSCA, EPA identifies and controls unreasonable risks associated with chemicals. The chemical right-to-know program addresses a critical gap in the nation's knowledge about the health and environmental hazards of high production volume chemicals (HPVs). EPA is working with industry to put information about those chemicals into the hands of the public so they can make better and more informed consumer choices.

EPA's Chemical Right-to-Know Initiative (ChemRTK) has already started providing the public with information on the basic health and environmental effects of the 2,800 highest production volume (HPV) chemicals in the United States (chemicals manufactured in or imported into the U.S. in quantities of at least 1 million pounds). Industry response to the HPV Challenge has been overwhelming: more than 460 companies have voluntarily committed themselves to providing EPA with test data for 2,155 chemicals and 187 chemical categories of the 2,800 HPV chemicals. EPA has already commenced its review and public posting of these company submissions. By the end of FY 2002, the Agency expects to have posted test data covering 10% of the HPV chemicals. EPA is requesting additional resources for the ChemRTK program in FY 2003 to bolster our ability to keep pace with the pending increase of industry data submissions. These additional resources will make it possible for EPA to nearly double the amount of publicly available HPV chemical test data, increasing the cumulative number of chemical data postings from 224 chemicals in 2002 to 420 chemicals in 2003 (16% of the 2,800 HPV's).

Under a parallel Voluntary Children's Chemical Evaluation Program that will be launched in 2002 (a pilot was started in 2001), EPA and industry will collaborate in fully assessing the risks associated with chemicals to which children are exposed. With our state partners we will work to establish a series of pilot programs to address TSCA responsibilities at the state level, where local knowledge of unique problems or solutions can bring greater efficiencies to this wide ranging program.

An important Agency priority is to develop and use valid chemical screens and tests to identify and characterize the risk of chemicals that may cause endocrine disruption in humans, fish and wildlife. In 2002 EPA will put in place an Endocrine Disruptor Methods Validation Subcommittee (EDMVS) made up of approximately 25 scientific experts representing outside interest groups. These experts will meet during 2002 and 2003 to provide advice and counsel to EPA on scientific issues associated with the conduct of studies necessary for validation of screening and testing methods listed in the Agency's Endocrine Disruptor Screening Program. The EDMVS will be reviewing the development of approximately 13 laboratory test methods.

Ensure Healthier Indoor Air for All

The Agency has set a goal of healthier indoor air for millions of students, staff, and faculty. To meet this goal, the Agency will reduce asthma incidents and other respiratory ailments by promoting improved indoor air quality and indoor environment management. By increasing the number of schools where "Tools for Schools" indoor air quality guidelines are adopted and implemented, healthier indoor air will be provided for millions of students, staff, and faculty. In FY 2003, improved air quality is anticipated for 1,050,000 students, staff and faculty through the voluntary Tools for Schools (TfS) program, including an effort to obtain commitments from five of the 50 largest school districts in the country to implement TfS.

In FY 2003, the Agency expects 848,000 Americans to be living in healthier residential indoor environments. Part of meeting this goal includes the expansion of EPA's successful community-based educational partnerships addressing sound indoor environmental management. In FY 2003, the Agency expects to utilize these partnerships to educate 136,000 people with asthma and their caregivers about improved indoor air quality techniques. Additionally, EPA will focus on indoor environment issues related to older Americans' health by assessing the links between environmental exposure and older Americans' health and developing activities to address those links. The Agency will also develop pilot programs with community organizations serving older populations in order to gather information and address and educate older Americans about indoor environmental issues.

Facilitate Prevention, Reduction and Recycling of PBT's and Toxic Chemicals

Pollution prevention and waste minimization require a comprehensive effort of minimizing the quantity and toxicity of waste generated by industries, the government and individual citizens. EPA's role includes several specific activities addressing industrial hazardous waste and municipal and industrial solid waste.

Preventing pollution can be cost-effective to industry in cases where it reduces excess raw materials and energy use. P2 can also reduce the need for expensive "end-of-pipe" treatment and disposal, enable firms to avoid potential liability, and support quality improvement incentives in place at facilities. Current EPA strategies include institutionalizing preventive approaches in EPA's regulatory, operating, and compliance/enforcement programs and facilitating the adoption of pollution prevention techniques by states, Tribes, the academic community and industry.

In FY 2003, EPA is requesting additional resources to launch a bold new Advancing Environmental Stewardship in America's Communities Initiative. The Agency will be working hand-in-hand with States to challenge and assist American industry in achieving important national environmental goals through new innovations in product and service design, production, and delivery.

One approach the Agency employs is the industrial sector-based focus that promotes cleaner technologies leading to a reduction of risks to health and the environment. EPA's Design for the Environment (DfE) Program works in partnership with industry to develop comparative risk, performance, and cost information about alternative technologies, chemicals, and processes in order to make environmentally informed business decisions.

In this objective, EPA provides the national leadership so important to reducing the generation of municipal and industrial solid waste regulated under RCRA Subtitle D and to improving the recovery and conservation of materials and energy through source reduction and recycling. EPA encourages source reduction of municipal solid waste through its WasteWise program and encourages recycling and the recycling market through such programs as Pay-As-You-Throw and Jobs Through Recycling. In addition, working with public and private sector stakeholders, EPA promotes financial and technological opportunities for recycling/reuse businesses. In FY 2003, the Agency will serve as a catalyst for innovative source reduction and recycling in many industrial sectors, including waste reduction opportunities for construction and demolition debris, food wastes, tires, electronics equipment, carpet, transport packaging, and plastic beverage packaging. EPA will kick off an environmental retail initiative that encourages consumers and individuals to think about environmental issues at the "point of purchase."

In the hazardous waste arena, regulated under RCRA Subtitle C, the Agency's focus is on reducing the presence of priority chemicals in hazardous waste by 50 percent by FY 2005 (compared to a 1991 baseline). This goal is consistent with other national and international toxic chemical reduction efforts. In FY 2003 the Agency will encourage and support implementation at the Regional, state and local levels through voluntary pollution prevention partnerships that not only make economic sense but must also decrease human and environmental exposure to toxic wastes. By FY 2003, EPA plans to initiate partnerships with companies willing to make specific commitments to reducing hazardous waste as part of the Agency-wide Voluntary Chemical Reductions program.

The Agency will continue reducing the barriers to safe recycling of hazardous waste through changes to recycling regulatory standards and ongoing outreach to stakeholders to explore additional innovations. EPA will place particular emphasis on ways to increase safe hazardous waste recycling while reducing the burden for small businesses concerned with printing, electronics recycling, and metal finishing.

The Green Chemistry Challenge Program continues to be an effective catalyst for the behavioral change necessary to drive the research, development, and implementation of green chemistry technologies. In addition, this program also continues to provide an opportunity to quantitatively demonstrate the technical, environmental, and economic benefits that green chemistry technologies offer. In 2003, the Green Chemistry Program will be focusing its

outreach, awards, and research efforts to target: 1) audiences not currently involved in green chemistry product and process design; and, 2) specific high priority chemicals, products, and/or processes for which safer alternatives are not available.

To address continuing issues associated with PBTs, EPA launched a cross-office, cross-media PBT program in FY 1999. Through this effort, the Agency seeks to prevent, minimize and, when possible, eliminate PBTs which are harmful to both human health and the environment. By the beginning of FY 2003, the Agency plans to be well into the implementation of its Mercury National Action Plan, focusing on seven key priority areas. Critical measurement and monitoring efforts will be in their third year, facilities will be collecting PBT chemical release data under the new TRI rule, and submissions under TSCA for approval of new PBT chemicals for entry into commerce will be under close scrutiny.

Assess Conditions in Indian Country

EPA places particular priority on working with Federally Recognized Indian Tribes on a government-to-government basis to improve environmental conditions in Indian country in a manner that affirms the vital trust responsibility that EPA has with some 572 Tribal governments. The Agency will concentrate on building Tribal programs and strive to complete a documented baseline assessment of environmental conditions for Tribes. These assessments will provide a blueprint for planning future activities identified in Tribal/EPA Environmental Agreements (TEAs) or similar Tribal environmental plans to address and support priority environmental multi-media concerns in Indian country.

In 2003, EPA is requesting a total of \$57.5 million for Indian General Assistance Program grants. These resources will allow most Tribes to support at least one or two persons working in their community to build a strong, sustainable environment for the future. These stewards perform vital work by assessing the status of a Tribe's environmental condition and building an environmental program tailored to that Tribe's needs. Another key role of this workforce is to alert EPA of serious conditions requiring attention in the near term so that, in addition to assisting in the building of Tribal environmental capacity, EPA can work with the Tribe to respond to immediate public health and ecological threats.

EPA continues to consider additional approaches on how EPA and Indian Tribes might work in concert to protect public health and the environment in Indian country. As part of that effort, EPA is proposing to continue authority granted in FY 01 to enter into cooperative agreements with Tribes to assist EPA in implementing environmental programs in instances where the Tribe has not achieved primacy. Implementation of this approach would allow for a more gradual transition to full program authorization by allowing for varying degrees of Tribal involvement based on an individual Tribe's capabilities and interests.

Research

In FY 2003, health effects research under this goal will continue to focus on development of mechanistically-based predictive models for human health risk assessment, such as structure-activity-relationship models, to help determine testing needs under Section 5 of the Toxic

Substances Control Act (TSCA), which addresses the introduction of new chemicals into commerce. Research will address the need for methods to evaluate effects associated with a variety of exposure conditions and the special sensitivities of certain subpopulations (including children) based on age, genetic factors, and health status. These methods will be used to evaluate endpoints of toxicity that are qualitatively different from those of concern for the general population. EPA will continue to participate in the Agriculture Health Study (AHS). The primary objective of the EPA exposure study is to collect high quality exposure data that can be used to evaluate how accurately the AHS questionnaire classifies pesticide application activities and enables the prediction of applicator exposure and dose.

Also, EPA proposes in FY 2003 to begin a major research effort focused on biotechnology. Areas of research will include: 1) potential allergenicity of proteins introduced into the food supply by biotechnology; 2) potential adverse ecological effects on non-target species or as a result of unintended gene transfer; and 3) potential development of pesticide resistance in the target species. This research will result in improved capability to assess the risks of allergenicity from genetically altered food, improved capability to assess the ecological risks associated with genetically modified organisms, and tools to manage gene transfer and resistance.

External Factors

The ability of the Agency to achieve its strategic goals and objectives depends on several factors over which the Agency has only partial control or influence. EPA relies heavily on partnerships with States, Tribes, local governments, the public and regulated parties to protect the environment and human health. In addition, EPA assures the safe use of pesticides in coordination with the USDA and FDA, who have responsibility to monitor and control residues and other environmental exposures, as necessary. EPA also works with these agencies to coordinate with other countries and international organizations with which the United States shares environmental goals. This plan discusses the mechanisms and programs that the Agency employs to assure that our partners in environmental protection will have the capacity to conduct the activities needed to achieve the objectives. However, as noted, EPA often has limited control over these entities. In addition, much of the success of EPA programs depends on the voluntary cooperation of the private sector and the general public.

Other factors that could delay or prevent the Agency's achievement of some objectives include: lawsuits that delay or stop EPA's and/or State partners' planned activities; new or amended legislation; and new commitments within the Administration. Economic growth and changes in producer and consumer behavior, such as shifts in energy prices or automobile use, could have an influence on the Agency's ability to achieve several of the objectives within the time frame specified.

Large-scale accidental releases or rare catastrophic natural events could, in the short term, impact EPA's ability to achieve the objectives. In the longer term, new environmental technology, unanticipated complexity or magnitude of environmental problems, or newly identified environmental problems and priorities could affect the timeframe for achieving many of the goals and objectives. In particular, pesticide use is affected by unanticipated outbreaks of

pest infestations and/or disease factors, which require EPA to review emergency uses to ensure no unreasonable risks to the environment will result. EPA has no control over requests for various registration actions which include among others new products, amendments, and uses, so its projection of regulatory workload is subject to change.

To achieve our collective goal of healthy indoor environments, EPA collaborates with Federal, state and local government agencies, industry, and non-profit organizations to conduct non-regulatory public outreach and education, provide incentives, and encourage voluntary actions. These are the primary methods EPA uses to influence individuals (e.g., homeowners, school administrators, parents, building owners) to take action to reduce their health risk. A key external factor which may impact the successful attainment of the indoor environments goal is the ability of states to leverage resources to achieve adequate results in the absence of funds devoted specifically to indoor air quality. In many cases, resources are limited and compete with Federally mandated regulatory programs (Environmental Law Institute Research Report on State and Local Indoor Air Quality Programs, November, 1997.)

The Agency's ability to achieve its objective of facilitating prevention, reduction and recycling of PBTs and toxic chemicals could be impacted by the increased flexibility provided to redirect resources under the National Environmental Performance Partnership System (NEPPS). If states redirect resources away from this area, it would impact both annual performance and progress implementing the Agency's strategic plan. To mitigate this potential issue, EPA is working with the Environmental Council of States (ECOS) to develop core measures and coordinating with states to reduce Persistent, Bioaccumulative, and Toxics (PBT) in hazardous waste and develop tools that will focus state activities on shared EPA and state goals.

In addition, recycling rates in the U.S. are affected by shifts in market prices for virgin materials and potential regulatory changes to reduce or eliminate disincentives to safe recycling. While market forces have helped to achieve current rates, better markets for recycled products/recyclables/reusables are needed to encourage increased recycling rates and source reduction. EPA has worked with other agencies to develop the Federal government's "buy recycled" program and the Federal Environmental Executive to promote this program and currently has several other ongoing projects to enhance markets for recycled materials.

Achieving our objective for Indian country is based upon a partnership with Indian Tribal governments, many of which face severe poverty, employment, housing and education issues. Because Tribal Leader and environmental director support will be critical in achieving this objective, the Agency is working with Tribes to ensure that they understand the importance of having good information on environmental conditions in Indian country and sound environmental capabilities. In addition, EPA also works with other Federal Agencies, the Department of Interior (US Geological Survey, Bureau of Indian Affairs, and Bureau of Reclamation), the National Oceanic and Atmospheric Administration, the Indian Health Service and the Corps of Engineers to help build programs on Tribal lands. Changing priorities in these agencies could impact their ability to work with EPA in establishing and implementing strategies, regulations, guidance, programs and projects that affect Indian Tribes.

Environmental Protection Agency

FY 2003 Annual Performance Plan and Congressional Justification

Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

Objective: Reduce Public and Ecosystem Risk from Pesticides

By 2005, public and ecosystem risk from pesticides will be reduced through migration to lower-risk pesticides and pesticide management practices, improving education of the public and at risk workers, and forming "pesticide environmental partnerships" with pesticide user groups.

Resource Summary (Dollars in Thousands)

	FY 2001 Actuals	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Reduce Public and Ecosystem Risk from Pesticides	\$54,262.3	\$56,026.3	\$55,409.8	(\$616.5)
Environmental Program & Management	\$40,250.6	\$42,020.1	\$41,358.0	(\$662.1)
Science & Technology	\$830.7	\$920.7	\$966.3	\$45.6
State and Tribal Assistance Grants	\$13,181.0	\$13,085.5	\$13,085.5	\$0.0
Total Workyears	227.0	241.9	239.1	-2.8

Key Program (Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	\$222.1	\$0.0	\$0.0	\$0.0
Congressionally Mandated Projects	\$598.6	\$1,700.0	\$0.0	(\$1,700.0)
Endocrine Disruptor Screening Program	\$757.5	\$750.5	\$768.9	\$18.4
Facilities Infrastructure and Operations	\$0.0	\$3,350.0	\$3,423.3	\$73.3
Homeland Security	\$0.0	\$482.4	\$0.0	(\$482.4)
Legal Services	\$261.9	\$308.2	\$328.6	\$20.4
Management Services and Stewardship	\$351.8	\$382.5	\$384.1	\$1.6
Partnerships to Reduce High Risk Pesticide Use	\$11,851.9	\$10,407.0	\$12,279.8	\$1,872.8
Pesticide Registration	\$12,072.3	\$10,609.7	\$11,016.6	\$406.9
Pesticide Reregistration	\$2,767.0	\$3,793.3	\$3,907.2	\$113.9
Pesticides Program Implementation Grant	\$13,085.5	\$13,085.5	\$13,085.5	\$0.0
Regional Management	\$18.2	\$0.0	\$21.9	\$21.9
Safe Pesticide Applications	\$10,135.4	\$11,157.2	\$10,193.9	(\$963.3)

FY 2003 Request

EPA will continue to assist farmers in transitioning to reduced risk pesticides and pest management practices as the Agency continues to implement the Food Quality Protection Act (FQPA) and restricts or removes older, riskier pesticides from the market. In FY 2003, EPA will continue to use a “whole farm approach” to pesticide management and pollution prevention. This approach simultaneously considers numerous risks associated with the agricultural use of pesticides, including spray drift, chemical runoff, pesticide disposal, groundwater protection, worker protection, and pesticide application techniques. This allows the Agency to pursue an integrated approach to pollution prevention. EPA will continue its commitment under this objective to protect agricultural workers, to certify and train pesticide applicators, to protect endangered species, non-target species such as benign insects, fish and wildlife, and ecosystems from the harmful effects of pesticides, to develop and implement environmental stewardship and integrated pest management pollution prevention strategies and to protect our nation’s groundwater from pesticide contamination.

Reduce Human Exposure to Pesticide Use

In 2003, through the Certification and Training Program (C&T) and the Worker Protection Program (WP), EPA will continue its partnership with states and Tribes in educating workers, farmers and employers on the safe use of pesticides and worker safety. The C&T and the WP programs protect agricultural workers, employers, applicators, handlers and the public from the potential dangers posed by pesticides. The Worker Protection Standards offer



protection to over three and a half million people who work with pesticides at more than 560,000 workplaces. The C&T program increases the competence of the applicators in handling and applying pesticides through training and certification (and recertification every three to five years) of private and commercial applicators of restricted use pesticides. C&T and WP also provide safety training for pesticide handlers and agricultural workers.

EPA will continue efforts to educate the public in the proper use of pesticides to prevent household and other pesticide misuse. EPA will focus its efforts in rural and urban areas with poor communities where there are disproportionate public health risks to residents, especially children.

EPA will employ product stewardship with manufacturers and distributors, and work with states to improve their certification and training programs. EPA continues to improve

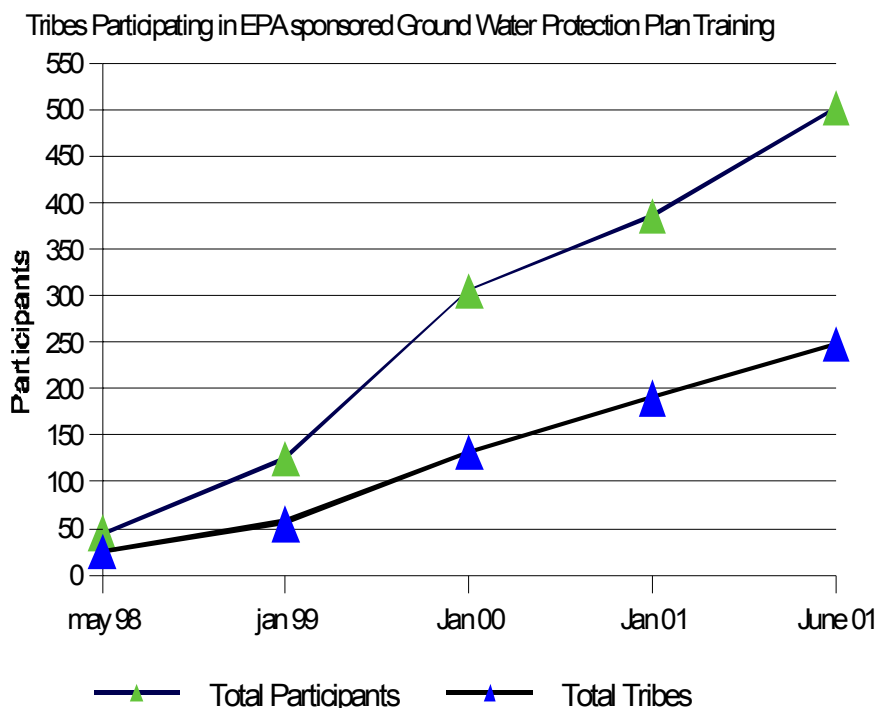
consumer product labels, communicate proper handling of pesticide containers and their distribution, and direct enforcement activities to prevent improper sales and use of agricultural pesticides. EPA continues to be concerned with the use of certain pesticides that are likely to show up in ground-water. The Agency is pursuing options to assess and manage pesticide use and contamination potential of those pesticides. The Ground-Water Strategy and the development of pesticide management plans provide an ongoing means of preventing pesticide contamination of our ground-water resources.

Regions will lead the development of FQPA transition projects with commodity groups and provide strategic and technical assistance on project design, implementation, and evaluation. The “whole farm” approach, conducted in cooperation with USDA and FDA, will focus on area-specific problems. Due to variations in crops, pests and weather patterns in different locales, a regional approach will be employed to address local needs. This approach will rely on partnerships between EPA, state agencies (Departments of Agriculture, Departments of Environment and Land Grant Universities) and agricultural groups (farm bureaus and major commodity groups). The first stage of the initiative evaluates current farm operations including pesticide risk reduction technologies, Integrated Pest Management (IPM) and Best Management Practices (BMPS), soil and water conservation, handling and storage of hazardous materials and solid waste management. Model or demonstration sites are used for purposes of outreach, education and compliance assistance for other agricultural operations throughout the state.

Reduce Environmental Exposure to Pesticide Use

In FY 2003, EPA and USDA will continue to provide information about pest control

options, organize and deliver pest management educational programs for agricultural producers, consumers, and other stakeholders on reduced risk pesticides and alternative pest control methods, such as IPM and Pesticide Environmental Stewardship (PESP). EPA will continue to support the development and evaluation of new pest management technologies.



The Pesticide Environmental Stewardship Program (PESP) and EPA's IPM activities are closely related in their efforts to promote risk reduction through increasing the use of safer alternatives to traditional chemical methods of pest control. PESP, through voluntary partnerships with pesticide users, seeks to reduce both health and environmental risks while incorporating pollution prevention strategies. Partners and supporters of PESP play vital roles in developing common sense approaches to pesticide risk reduction, including use of integrated pest management (IPM), biological and cultural controls, and weather and pest data decision models. PESP supporters have an interest in risk reduction because they use agricultural products or represent groups affected by pesticides. This program began in 1994,

prior to FQPA, however, its focus is consistent with the statute's goals in reducing risk in agricultural and nonagricultural settings. PESP grants provide assistance to partners and supporters in developing and implementing risk reduction strategies. EPA will continue to coordinate with USDA in encouraging and supporting IPM practices, fostering the managed use of an array of pest control methods (biological, cultural, mechanical, and chemical) that achieve the best results with the least adverse impact to the environment.

The Endangered Species Protection Program (ESPP), started in 1988, is largely voluntary and relies on cooperation between the U.S. Fish and Wildlife Service (FWS), EPA Regions, states, and pesticide users. The Endangered Species Act is intended to protect and promote the recovery of animals and plants that are in danger of becoming extinct. Under the Act, EPA must

Promoting Use of Integrated Pest Management In Schools

One of EPA's highest priorities is protecting children's health from unnecessary exposure to pesticides that are used in their schools to control pests. EPA is encouraging school officials to adopt Integrated Pest Management (IPM) practices to reduce children's exposure to pesticides while maintaining effective control of pests.

A goal of the IPM in Schools Initiative is to efficiently integrate an IPM program with the school's existing pest management plan and other school management activities. School management activities such as preventive maintenance, janitorial practices, landscaping, occupant education, and staff training are all part of an IPM program. The following steps are required to develop an IPM decision network:

1. Developing an official policy statement for school pest management
2. Designating pest management roles
3. Setting pest management objective for sites
4. Inspecting, identifying and monitoring for incipient pest populations
5. Setting action thresholds
6. Applying IPM strategies
7. Evaluating results and record keeping

EPA is helping schools understand and implement IPM through the distribution of printed publications, awarding grants to start IPM programs, offering workshops and courses and providing guidance and assistance through partnerships with universities and national associations.

ensure that use of pesticides will not result in harm to species listed as endangered and threatened, or harm habitat critical to those species' survival. To implement the ESPP, labels of certain pesticides direct users to bulletins with information on how to protect endangered and threatened species from harm when using pesticides.

In order to protect listed species from harm resulting from pesticide use, the Agency will continue to do the following:

- Use sound science to assess the risk of pesticide exposure to listed species.
- Implement use limitations by adding a generic label statement; developing county bulletins containing maps of species' locations and pesticide use limitations; distributing the bulletins and other materials; and providing a toll-free telephone number to assist users in determining whether they need a bulletin and where to obtain one.
- Encourage individual states and Tribes to develop their own endangered species protection plans to meet the program's goals.

Antimicrobial pesticides are used to kill microorganisms on surfaces and objects in hospitals, schools, restaurants and homes. EPA registers and regulates antimicrobial pesticides under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). To obtain registration, manufacturers of antimicrobial products must meet basic standards, the foremost being:

- The product will not cause unreasonable adverse effects to human health or the environment.
- Product labeling and composition comply with the requirements of FIFRA.

Manufacturers are required to submit to EPA detailed and specific information concerning the chemical composition of their product; effectiveness data to document their claims against specific microorganisms and to support the directions for use provided in labeling; labeling that reflects the required elements for safe and effective use; and toxicology data to document any hazards associated with use of the product.

The Agency will continue to address concerns regarding the efficacy of public health products used to kill microorganisms in hospitals, schools, restaurants, and homes. The private and public sector communities including competitor registrants, have made the Agency aware of sterilizers and hospital disinfectants which may be ineffective. Sterilizers and disinfectants are increasingly vital to containing infections that are resistant to antibiotics in clinical settings. EPA has responded to this situation by developing a comprehensive strategy to improve the regulation of antimicrobial pesticides. In keeping with a major component of the strategy, EPA has greatly improved communications with the public, all levels of government, academia, user communities, industry, health professionals, trade organizations, and independent testing groups. Additionally, the Agency has enhanced and expanded its use of the Internet to educate the general public about the status and direction of the regulation for antimicrobial products.

The strategy also seeks to improve the regulation of antimicrobials through improvement of EPA's regulatory processes. EPA has committed resources to ensure that efficacy tests for

antimicrobial products are reliable and reproducible and that internal controls are improved to ensure the integrity of data submitted by registrants. Further, the Agency is developing a complaint system to handle concerns regarding ineffective products.

Reducing the risks of pesticide exposure is a particular challenge on Tribal lands. Native Americans often consume different foods than the average American, eating more wild game and fish following traditional subsistence diets, and using different farming practices. Their patterns of exposure may not be adequately represented in the general public dietary or other exposure information gathered by USDA, FDA or the registrant. Outreach and education tools must be matched to Tribal needs.

In 2003, the program will have completed a review of Tribal needs through a series of focus groups. In addition, the Agency will continue to team with our Tribal partners to address pesticide issues and enhance the development of Tribal technical capacity, particularly in the areas of risk management, worker safety, training, and pollution prevention. The effectiveness of our field programs on Tribal lands is directly related to Tribal capacity for pollution prevention. Agency efforts include the following:

- Enhancing Tribal environmental program capacity by conducting multi-media risk assessments
- Providing training and technical assistance for Tribal environmental managers to conduct their own assessments and mitigation activities, with a primary emphasis on pollution prevention, to reduce children's exposure to pesticides as well as Persistent Bioaccumulative Toxics (PBTs), lead and other toxic substances

Regional programs are also expanding work to address Homeland Security concerns in FY 2002. Activities include expanded outreach to chemical and pesticide producers, distributors, and users; an additional field presence to monitor imports under FIFRA and TSCA; and coordination with partners to address security issues surrounding private pesticide applicator certification.

FY 2003 Explanation of Change from FY 2002 President's Budget

EPM

- (+\$300,000) This increase reflects restoration of base contract dollars to Pesticides Certification and Training program. Funds were reprogrammed in 2002 to make up for the fee revenue shortfall in the salary account for tolerance reassessment and reregistration staff.
- (+\$550,000) This increase reflects restoration of base contract dollars to the registration program's analysis work to ensure newly registered pesticides are safe for the environment. Funds were reprogrammed in 2002 to make up for the fee revenue shortfall in the salary account for expedited registrations.

- (+\$110,000) This increase reflects restoration of base contract dollars to the groundwater implementation program. Funds were reprogrammed in 2002 to make up for the fee revenue shortfall in the salary account for tolerance reassessments and reregistration staff.
- (+\$310,000) This increase reflects restoration of base contract dollars to the Worker Protection program. Funds were reprogrammed in 2002 to make up for the fee revenue shortfall in the salary account for tolerance reassessments and reregistration staff.
- (-\$107,000) This decrease reflects the change in funding source for the tolerance reassessment program from appropriated dollars in FY 2002 to fee revenue from the new tolerance processing fee.
- (-\$482,000, -2.0 FTE) This decrease reflects completion of first phase of outreach to states and agricultural community to address security issues surrounding pesticide use, application and production.
- (- \$600,000) This decrease reflects non-continuation of Congressional adds in the FY 2002 appropriation.

Annual Performance Goals and Measures

Agriculture Partnership

- In 2003 Focus partnership development that indicates a successful transition on minor use commodity groups which use high risk pesticides (organophosphates, carbamates and B2 carcinogens).
- In 2003 With USDA, universities, state lead agencies, and other stakeholders, promote the research and adoption of reduced risk pest management strategies (pilot APG).
- In 2002 Implementation of 10-15 model agricultural partnership projects that demonstrate and facilitate the adoption of farm management decisions and practices that provide growers with a "reasonable transition" away from the highest risk pesticides.
- In 2001 EPA began implementation of 12 model agricultural pilot projects.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Model agricultural partnership pilot projects	12	10-15 Addit.		Pilots
Successful transitions from high risk pesticides to effective alternative pest management practices			20-30	Transitions
Collaboration/outreach efforts			40	Efforts

Baseline: Under development

Pesticides in Groundwater

- In 2003 Pesticides with high leaching and persistence potential managed to protect groundwater resources from contamination.
- In 2002 Pesticides with high leaching and persistence potential will be managed through significant actions to protect groundwater resources from contamination.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Pesticides with high leaching and persistence potential managed to protect groundwater		22	25	Pest. (Cum)

Baseline: Thirty-one pesticides have been identified as of March 2000. Baseline revised in FY02 to administrative measure that tracks regulatory decisions that reduce impact of high leaching and persistent pesticides on the environment because of concerns about NAWQA data; i.e., it may not be replicating survey due to funding and survey design which may use different survey sites from year to year. New PM targets will be established in FY02.

Reduce Risk to Endangered Species

In 2003 None of the top 15 species on the Office of Pesticide Programs/Fish and Wildlife Service/ U.S. Department of Agriculture (OPP/FWS/USDA) priority list of threatened or endangered species will be jeopardized by exposure to pesticides.

In 2002 None of the top 15 species on the Office of Pesticide Programs/Fish and Wildlife Service/ U.S. Department of Agriculture (OPP/FWS/USDA) priority list of threatened or endangered species will be jeopardized by exposure to pesticides.

Performance Measures:	FY 2001	FY 2002	FY 2003	
	Actual	Enacted	Request	
Species on priority list jeopardized		0	0	Species

Baseline: Top 15 species on OPP/FWS/USDA list for the year.

Reduce Wildlife Incidents and Mortalities

In 2003 Reduce by 20 percent from 1995 levels the number of incidents involving mortalities to terrestrial and aquatic wildlife caused by pesticides.

In 2002 Reduce by 10 percent from 1995 levels the number of incidents and amount of mortalities to terrestrial and aquatic wildlife caused by the 15 pesticides currently responsible for the greatest mortality to such wildlife.

Performance Measures:	FY 2001	FY 2002	FY 2003	
	Actual	Enacted	Request	
Reported incidents involving mortalities to birds and fish		10%	20%	Reduction

Baseline: 80 reported bird incidents (involving 1150 estimated bird casualties); 65 reported fish incidents (involving 632,000 estimated fish casualties)

Verification and Validation of Performance Measure

Congressional Performance Measure: Reduce by 20 percent from 1995 levels the number of incidents involving mortalities to terrestrial and aquatic wildlife caused by pesticides.

Performance Database: The Ecological Incident Information System (EIIS) is a national database of information on poisoning incidents of nontarget plants and animals caused by pesticide use. This database is maintained by the Environmental Fate and Effects Division of the Office of Pesticide Programs.

Data Source: Data are extracted from written reports of fish and wildlife incidents submitted to the Agency by pesticide registrants under Federal Insecticide Fungicide and Rodenticide Act (FIFRA), Section 6(a)(2), as well as incident reports voluntarily submitted by state and federal agencies involved in investigating such incidents.

QA/QC Procedures: There is a process to ensure data quality for this measure. Before entering an incident, a database program is used to screen for records already in the database with similar locations and dates. Similar records are then individually reviewed to prevent duplicate reporting. After each record is entered into the EIIS database, an incident report is printed that contains all the data entered into the database. A staff member, other than the one who entered the data, then reviews the information in the report and compares it to the original source report

to verify data quality. Scientists using the incident database are also encouraged to report any inaccuracies they find in the database for correction.

Data Quality Reviews: Internally and externally conducted data quality reviews related to data entry are ongoing. When resources allow incorporation of wildlife data from private organizations, such as the American Bird Conservancy, the new data and EIIS data are reviewed in concert for quality during data entry.

Data Limitations: This measure is designed to monitor trends in the numbers of acute poisoning events reported to the Agency. Because the data are obtained, in part, through voluntary reporting, the numbers of reported incidents may not accurately reflect the numbers of actual incidents. Therefore, it is important to consider the possible factors influencing changes in incident reporting rates over time when evaluating this measure.

New/Improved Data or Systems: The Office of Pesticide Programs is currently conducting a project with the American Bird Conservancy, reviewing the data in its Avian Incident Monitoring System on bird kill incidents caused by pesticides. These data will be incorporated into the EIIS. The project should improve the quantity and quality of data in the EIIS database on avian incidents.

Coordination with Other Agencies

EPA coordinates with various state, Tribal, and federal agencies as well as with private organizations to ensure that our strategic approaches to pollution prevention and risk reduction are comprehensive and compatible with efforts already in place. Achievement of this objective depends in part on successful cooperation with our partners and the successful implementation of our regulatory programs. The number of partnerships with private and public entities serves as an effective indicator of EPA's progress in meeting its stated objectives.

Coordination with state lead agencies and with the U. S. Department of Agriculture (USDA) provides added impetus to the implementation of the Certification and Training program. States also provide essential activities in developing and implementing the Endangered Species, Groundwater, and Worker Protection programs. States are involved in numerous special projects and investigations, including emergency response efforts. The Regions provide technical guidance and assistance to the states and Tribes in the implementation of all pesticide program activities.

EPA uses a range of outreach and coordination approaches for pesticide users, for agencies implementing various pesticide programs and projects, and for the general public. Outreach and coordination are essential to protect workers, endangered species, and groundwater; to provide training of pesticide applicators; to promote integrated pest management and environmental stewardship; and to support compliance through EPA's regional programs and those of the states and Tribes.

In addition to the training that EPA provides to farm workers and restricted use pesticide applicators, EPA works with the state Cooperative Extension Services designing and providing specialized training for various groups (e.g., training to private applicators on the proper use of personal protective equipment and application equipment calibration, how to handle spill and

injury situations, farm family safety, how to prevent drift, and pesticide and container disposal). Other specialized training is provided to public works employees on grounds maintenance, to pesticide control operators on proper insect identification, and on weed control for agribusiness.

Statutory Authorities

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

Federal Food, Drug and Cosmetic Act (FFDCA)

Food Quality Protection Act (FQPA) of 1996

Clean Water Act

Environmental Protection Agency

FY 2003 Annual Performance Plan and Congressional Justification

Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

Objective: Reduce Risks from Lead and Other Toxic Chemicals

By 2007, significantly reduce the incidence of childhood lead poisoning and reduce risks associated with polychlorinated biphenyls (PCBs), mercury, dioxin, and other toxic chemicals of national concern.

Resource Summary (Dollars in Thousands)

	FY 2001 Actuals	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Reduce Risks from Lead and Other Toxic Chemicals	\$33,927.9	\$36,423.5	\$36,355.9	(\$67.6)
Environmental Program & Management	\$20,130.6	\$22,741.5	\$22,673.9	(\$67.6)
State and Tribal Assistance Grants	\$13,797.3	\$13,682.0	\$13,682.0	\$0.0
Total Workyears	139.3	144.2	144.7	0.5

Key Program (Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	\$96.8	\$0.0	\$0.0	\$0.0
Congressionally Mandated Projects	\$130.7	\$380.0	\$0.0	(\$380.0)
Facilities Infrastructure and Operations	\$0.0	\$1,940.1	\$2,076.6	\$136.5
Grants to States for Lead Risk Reduction	\$13,682.0	\$13,682.0	\$13,682.0	\$0.0
Homeland Security	\$0.0	\$150.0	\$0.0	(\$150.0)
Lead Risk Reduction Program	\$14,214.3	\$13,092.6	\$13,166.3	\$73.7
Legal Services	\$188.8	\$220.4	\$238.9	\$18.5
Management Services and Stewardship	\$58.6	\$182.9	\$197.6	\$14.7
National Program chemicals: PCBs, Asbestos, Fibers, and Dioxin	\$6,103.8	\$6,775.5	\$6,994.5	\$219.0

FY 2003 Request

Lead Risk Reduction Program

EPA is working closely with other Federal Agencies to eliminate childhood lead poisoning. EPA establishes many of the standards for lead abatement and hazard levels that guide state, private and federal activities. HUD grants speed the abatement process in older housing. EPA and the states and tribes ensure there are enough trained, certified professionals to do this potentially hazardous work. Local health departments also have a key role in identifying priorities for abatement based on health impacts to children. During 2003, the states, Tribes and EPA will continue to implement the Lead Based Paint Training & Certification Program in all fifty-five states and territories and in Tribal lands. In the lead regulatory program, EPA will work towards finalizing one major rule setting standards for training and certification for renovation and remodeling activities, and work towards proposing a rule regarding the deleading of bridges and other structures. EPA's FY 2003 lead activities will make significant contributions to virtually eliminating lead poisoning for our nation's children.

The concentration of lead in a child's blood is typically used as an index of lead exposure. Over the past decade, there has been concern about blood-lead levels once thought to be safe. Since 1975, the Centers for Disease Control and Prevention (CDC) has lowered the blood-lead level considered elevated for children from 40 ug/dl (micrograms per deciliter) to 10 ug/dl (the evidence of health effects below 10 ug/dl is not sufficiently strong to warrant concern).

According to HUD's National Survey of Lead and Allergens in Housing, an estimated 38 million homes (40percent of all homes) contain some lead-based paint. The likelihood, extent, and concentration of lead-based paint vary with the age of the building. Eighty-seven percent of housing units constructed before 1940, 69 percent of units constructed between 1940 and 1959, and 24 percent of units constructed between 1960 and 1977 contain some lead-based paint. Over five million (or 14 percent) of these homes with some lead-based paint have children under age six in residence. Subchapter IV of TSCA (the 1992 Residential Lead-Based Paint Hazard Reduction Act) focuses on children younger than six years.

Small children like to put things in their mouths. Ingestion of lead-contaminated dust and soil through normal hand-to-mouth activity is the primary pathway of lead exposure to U.S. children under six years of age. Lead can contaminate dust when lead-based paint deteriorates, or when lead-based paint is disturbed in the course of renovation, repair, or abatement activity. Soil contaminated with lead from deterioration of exterior lead-based paint, industrial emissions, or from past uses of leaded gasoline may be ingested directly or contribute to indoor levels of lead-contaminated dust when tracked into the home. Children may also be exposed to lead through ingesting lead-based paint chips from flaking walls, windows, and doors or from chewing on surfaces covered with lead-based paint. Other sources of lead exposure include, but are not limited to, lead-contaminated food and drinking water and parental occupational exposure to dust and airborne lead particles.

Considerable progress has been made on a number of different fronts in reducing environmental lead levels. In 1973, the Federal government began taking steps to eliminate sources of lead. Efforts include EPA phasing out leaded gasoline and the Consumer Product

Safety Commission (CPSC) banning the production and sale of lead-based paint for residential use in 1978. In addition, EPA has implemented more stringent standards for lead in drinking water, and the domestic canning industry voluntarily eliminated the use of lead in solder to seal food cans. As a result of these past and ongoing efforts, children's blood levels have declined over 80 percent since the mid-1970s.

Data from the National Health and Nutrition Examination Survey (NHANES) conducted by the National Center for Health Statistics indicate that from 1976-1980 to 1999 the geometric mean blood lead level for children aged 1-5 years decreased from 15.0 micrograms per deciliter (ug/dL) to 2.0 ug/dL. According to NHANES III Phase 2, conducted from 1991 to 1994, approximately 900,000 children aged 1-5 years had blood lead levels equal to or exceeding 10 ug/dL, the level of concern for children established in 1991 by the Centers for Disease Control and Prevention (CDC). More recent NHANES estimates of the number of children with blood lead levels at or above 10 ug/dL are not available. However, data reported to CDC from nineteen state surveillance programs show that the proportion of tested children under age 6 with blood lead levels at or above 10 ug/dL decreased from 1996 to 1998.

Although lead exposure can affect children across all socioeconomic strata and in all regions of the country, children in poor inner-city communities, however, are disproportionately affected because lead-based paint hazards are more prevalent in deteriorated older housing and the overall ambient level of environmental lead tends to be higher in inner cities. Nationally, children in Medicaid comprise 80 percent of children with blood lead levels 15 ug/dl and above. Studies by the Centers for Disease Control (1988-1991) indicate that children living in central cities are three to four times more likely to have blood-lead levels equal to or exceeding 10 ug/dl than those outside central cities, with the highest prevalence in cities where populations exceed one million.

EPA, under Subchapter IV of TSCA, assists and guides federal activities aimed at reducing the exposure of children in homes with lead-based paint. Other Federal agencies, such as HUD and Health and Human Services (HHS), via the National Institute for Occupational Safety and Health and the CDC, also play important roles. In the past six years, EPA has made great strides in protecting children from lead poisoning through a combination of rulemaking, education, research, and partnerships. EPA has promulgated regulations to set up a federal infrastructure, including the lead accreditation, certification and workplace standards rule for targeted housing, the lead real estate notification and disclosure rule (with HUD), the lead renovation information rule, and standards identifying lead hazards in paint, dust and soil. The public education programs and tools developed include a national clearinghouse to provide the public with information on lead; and grants to states and Tribes to establish accreditation; certification and workplace standards programs for targeted housing.

Grants to States for Lead Risk Reduction

EPA has approved those states, territories and Tribes that intend to run programs for lead accreditation certification, and workplace standards in targeted housing. Although all states, territories and Tribes will not adopt the program, we intend to encourage several more to do so. However, EPA will be required to run a Federal lead program in 15 to 20 states and in most of the tribal lands and U.S. territories.

With implementation of the training, certification and accreditation program by states, territories or tribes, or in some cases by EPA, additional data is becoming available to help measure progress in reducing childhood lead poisoning and elevated blood-lead levels. In the future, EPA is working to be able to measure progress in reducing lead-based paint exposures through the collection of data associated with the Lead Abatement Program and has developed pilot measures projects to test their viability. In addition, the Agency will know how many professionals become certified as risk assessors, inspectors, workers or supervisors. This data will be used to measure the growth of a well-trained workforce capable of performing abatements safely and reliably.

National Program Chemicals Program

Most chemicals were introduced into commerce before the risks were known. A number of these chemicals are both prevalent and high-risk. The Agency has established a national program to manage reductions in use, safe removal, disposal or containment of these chemicals, as appropriate. Significant risks are well established for PCBs, asbestos, and dioxin, for example, and reductions in use and releases have been important to reducing exposure of the general population and sensitive subpopulations. Risk reduction efforts on these chemicals will continue to meet the mandates under TSCA and fulfill the commitments made in domestic and international

Dioxin Exposure Initiative

The EPA Dioxin Exposure Initiative (DEI), begun in 1994, is a cross-media effort to develop the scientific tools and understanding needed to quantitatively link dioxin sources to exposure of the general population. DEI scientists are working back through exposure pathways to identify the points of origin of current dioxin exposure and the relative contribution different sources make to dioxin risks. This information will allow EPA, the states and other federal agencies to focus their risk management attention on those sources and pathways of greatest public health significance.

Results from the DEI have already resulted in significant advances in our understanding of dietary routes of exposure. In addition, DEI results to date have established baseline measurements of dioxins in food and air that will permit the tracking of environmental trends and evaluation of the effectiveness of dioxin risk management programs.

In FY 2002, activities will focus on operation of the National Dioxin Air Monitoring Network (NDAMN), continuation of field and chamber studies to characterize dioxin from uncontrolled combustion sources, air transport modeling of 2000 emission inventory, and cooperative efforts with FDA and USDA to identify and quantify dioxin pathways in animal feeds.

Program outputs will include issuing a final 2001 dioxin inventory, results of the 2002 NDAMNS cycle, and results from round 1 of EPA/USDA animal feed studies. Continuation and strengthening of the DEI is a central theme in EPA dioxin strategy development. USDA and FDA have been active partners in the planning and implementation of many DEI projects.

agreements. In 2003, EPA's PCB control efforts will continue encouraging phase out of PCB electrical equipment, ensuring proper storage or waste disposal methods and capacity, and fostering PCB site cleanups. These activities are reflected in our Annual Performance Goals which measure disposal trends since 1990. Recent rulemakings have provided industry with the opportunity to propose alternative risk-based PCB cleanups. Also, the Agency will continue to review existing approvals for facilities that treat, store and/or dispose of PCBs, on a five to ten year renewal cycle.

The Agency will also pursue opportunities for risk reduction for mercury, and for certain industrial fibers that may pose risks in the workplace. In 2002 EPA is coordinating with the states to develop a strategy for addressing mercury. Approximately 10 percent of women in the U.S. have mercury levels in their blood within one-tenth of potentially hazardous levels. This indicates a very narrow margin of safety, especially since mercury is one of the materials that accumulate in the system. Other efforts will focus on outreach and technical assistance in the asbestos program for schools, in coordination with the Occupational Safety and Health Administration and the states, as needed. A new project to determine the risks to homeowners and remodelers from asbestos-contaminated vermiculate home insulation is underway and should be completed in 2002.

EPA plans to develop an agencywide dioxin strategy to respond to new findings in the scientific community concerning the potential risks of dioxin and address dioxin risk management in a more comprehensive cross-media approach. EPA will better examine reducing dioxin exposure, focusing on identifying and better quantifying the link between dioxin sources and the general population exposure.

FY2003 Explanation of Change from the FY2002 President's Budget

EPM

- (-\$170,000) This decrease to the Lead program's outreach activities reflect a hold on the award of certain public outreach grants while the program is undergoing evaluation and competitive sourcing is implemented. Regulatory support is also decreased to reflect progress toward completion of the regulatory requirements for the lead program.
- (-\$150,000) This decrease reflects completion of first phase of outreach to states and industry regarding chemicals of potential concern for terrorists threats.
- (-\$350,000) This decrease reflects non-continuation of Congressional Adds from the FY 2002 appropriation.

Annual Performance Goals and Measures

Lead Regulatory Standards

In 2001 EPA finalized a rule that establishes standards regarding hazardous levels of lead in paint, dust and soil.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Lead Hazard Standards Rule - develop final	1 final			Rule

Baseline:

Safe PCB Disposal

In 2003 Promote safe disposal of PCB-contaminated equipment and waste.

In 2002 Promote Safe disposal of PCB contaminated equipment and waste.

In 2001 Capacitor, Transformer and Bulk Waste data reported by industry on a calendar year basis and not available until September 2002.

The Transformer Reclassification Rule was published on April 2, 2001.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Safe Disposal of Transformers	Avail. 9/1/02	10000	10000	Transformers
Safe Disposal of Capacitors	Avail. 9/1/02	22000	25000	Capacitors
Safe Disposal of Bulk Waste	Avail. 9/1/02	660,000,000	660,000,000	Kg Bulk Waste
Develop Final Transformer Reclassification Rule				Rule

Baseline: Baseline for Capacitors: 1.85 million units; Transformers 2.20 million units; baseline for bulk waste disposal is based on annual disposal of PCB bulk waste from 1990-1995.

Lead Certification and Training of Lead Abatement

In 2003 Reduce lead exposure in housing units and in the deleading of bridges and structures.

In 2002 Implement certification and training of lead abatement professionals.

In 2002 Prepare rules on training, accreditation and certification requirements for renovation and remodeling activities and training, accreditation and certification requirements for lead-based paint activities in buildings and superstructures.

In 2001 EPA did not finish this rule.

In 2001 More than 2,000 individuals were certified as lead abatement professionals. This number was estimated from the monthly average of incoming Certification Applications. An improved tracking mechanism is being negotiated with a contractor for future years.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Evaluate results from pilot test of indicators and modify for implementation nationwide.				Analysis
Building and Superstructure Rule		In development	1 Proposed	Rule
Certified individuals only in states with federally administered program	>2,000			Certified
Certified nationally (federally-administered and state-administered program)		4000	5000	Certified

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Number of Abatements			pilot (TBD)	Notifications
Pilot Regional effort to monitor reduction in lead exposures			3	Regions
Renovation and Remodeling Rule	incomplete	in development	1 Proposed	Rule
Administer data collection grants to Tribes to determine Tribal lead exposure			15	Grants

Baseline: Baseline will be established in 2001. (Note: 2003 goal of 5000 assumed that both EPA and state certifications would be counted. We have been unable to confirm when/if we will get state data, so are now limiting this to EPA data.) Rule development was initiated in 1998; no consistent standard for abating lead paint for renovation or buildings/superstructures existed prior to Title X.

Verification and Validation of Performance Measures

Performance Measure: Number of certified individuals nationally

Performance Database: Regional Office records.

Data Source: Currently, all information is received through informal reporting from Regional offices, and originates from information submitted via certification applications. In the future, we will track certifications centrally.

QA/QC Procedures: Applicants are given photo identifications to prevent cheating at certification testing centers. EPA Headquarters reviews applications for completeness, including checking for the required information and materials. Regions review applications for quality, including a more substantive review of the application. Third-party test centers have extensive QA/QC controls under the contract.

Data Quality Review: Data quality reviews of records maintained at the test centers are conducted during routine compliance monitoring of the centers using Office of Enforcement and Compliance Assurance procedures. The reviews have found occasional discrepancies but no regional or national trends have come to light requiring systemic modifications to any record-keeping or QA/QC procedures.

Data Limitations: We have certification data from nine out of ten EPA regional offices. We expect that the remaining regional office would add no more than 300 certified entities to the baseline count. If an individual or firm was certified in more than one EPA Region, they have been double-counted. We expect that these difficulties will be resolved once we have in place a centralized database.

New/Improved Data or Systems: We hope to have a centralized, contractor-run tracking system in place by 2003.

Coordination with Other Agencies

The success of EPA's lead program depends on effective coordination with other Federal agencies, states and Indian Tribes. In 2002-2003, EPA plans to propose a rule for lead-based paint renovation and remodeling (R & R) activities. EPA will coordinate with HUD to clarify how these new rules may affect existing EPA and HUD regulatory programs, and with the Federal Highway Administration of DOT and with OSHA of DOL on worker protection issues. Both the R & R Rule and the Buildings and Structure Rule could result in worker protection requirements for personnel from State and local governments. Currently these workers are not subject to OSHA construction requirements. EPA will continue to work closely with state and Federally recognized Indian Tribes to ensure that: 1) authorized state and Tribal programs continue to comply with requirements established under TSCA; and 2) the ongoing Federal accreditation certification and training program for lead professionals is administered effectively; and 3) the States and Tribes adopt the R & R and the Buildings and Structures Rule when these rules become effective.

EPA has a Memorandum of Understanding (MOU) with HUD on coordination of efforts on Lead-based paint issues. As a result of the MOU, EPA and HUD co-chair an Interagency Task Force that has been regularly meeting since 1989. There are 14 other Federal agencies including CDC and DOD on the Task Force.

EPA, HUD and the National Institutes of Standards and Technology have recently been working to identify reliable at-home test kits for lead based paint to recommend to do-it-yourself renovators. HUD and EPA also have a joint Lead Hotline and share enforcement of the Disclosure Rule.

Mitigation of existing risk is a common interest for other federal agencies addressing issues of asbestos and PCBs. EPA will continue to coordinate interagency strategies for assessing and managing potential risks from asbestos and other fibers. Coordination on the safe PCB disposal is an area of ongoing emphasis with the Department of Defense (DoD), and particularly with the US Navy, which has special concerns regarding ship scrapping. PCBs and mercury storage and safe disposal are also important issues requiring coordination with the Department of Energy and DOD as they develop alternatives and explore better technologies for storing and disposing high-risk chemicals.

Statutory Authorities

Toxic Substances Control Act (TSCA) section 4 , 5, 6, 8, 12(b) and 13 (15 U.S.C. 2603-5, 2607, 2611 and 2612)

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) sections 3, 4, 5, 6, 11, 18, 24, and 25 (7 U.S.C. 136a, 136a-1, 136c, 136d, 136i, 136p, 136v, and 136w)

Asbestos Hazard Emergency Response Act (AHERA)

Asbestos School Hazard Abatement Act (ASHAA)

Environmental Protection Agency

FY 2003 Annual Performance Plan and Congressional Justification

Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

Objective: Manage New Chemical Introduction and Screen Existing Chemicals for Risk

By 2007, prevent or restrict introduction into commerce of chemicals that pose risks to workers, consumers, or the environment and continue screening and evaluating chemicals already in commerce for potential risk.

Resource Summary (Dollars in Thousands)

	FY 2001 Actuals	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Manage New Chemical Introduction and Screen Existing Chemicals for Risk	\$69,315.0	\$75,337.8	\$77,538.2	\$2,200.4
CREDIT SUBSIDY RE-ESTIMATE	\$3,580.0	\$0.0	\$0.0	\$0.0
Environmental Program & Management	\$45,428.6	\$53,190.7	\$52,388.6	(\$802.1)
Science & Technology	\$20,306.4	\$22,147.1	\$25,149.6	\$3,002.5
Total Workyears	379.6	400.3	391.2	-9.1

Key Program (Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	\$233.8	\$0.0	\$0.0	\$0.0
Community Assistance	\$556.5	\$474.4	\$507.1	\$32.7
Congressionally Mandated Projects	\$486.5	\$487.5	\$0.0	(\$487.5)
Endocrine Disruptor Screening Program	\$3,634.1	\$2,952.8	\$2,934.2	(\$18.6)
Environmental Monitoring and Assessment Program, EMAP	\$143.0	\$66.0	\$0.0	(\$66.0)
Existing Chemical Data, Screening, Testing and Management	\$24,522.4	\$28,286.4	\$28,331.9	\$45.5
Facilities Infrastructure and Operations	\$1,270.3	\$5,983.8	\$5,600.5	(\$383.3)
Homeland Security	\$0.0	\$1,102.2	\$0.0	(\$1,102.2)
Legal Services	\$803.3	\$912.3	\$979.6	\$67.3
Management Services and Stewardship	\$1,004.2	\$824.5	\$725.8	(\$98.7)
New Chemical Review	\$12,620.2	\$12,477.2	\$13,123.8	\$646.6
Research to Support Safe Communities	\$20,093.7	\$21,593.6	\$25,149.6	\$3,556.0
Science Coordination and Policy	\$0.0	\$177.1	\$185.7	\$8.6

FY 2003 Request

This objective includes work in four broad program areas:

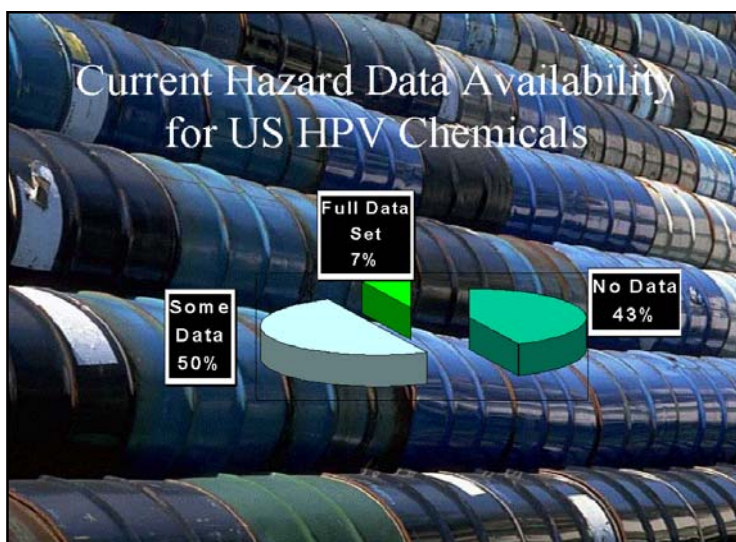
- Governing the introduction of new chemicals into commerce (chemicals in the process of commercialization)
- Assessing the risks of existing chemicals (chemicals in commerce)
- Screening and testing chemicals for endocrine disruptor effects
- Assessing the safety of biotechnology products and genetically modified organisms

These programs are pivotal to reducing current and future risk by preventing or controlling the production of new chemicals that pose unreasonable risks and assessing and addressing the risks of chemicals already in commerce.

One of the major program priorities in FY 2003 is the Chemical Right-to-Know (ChemRTK) Program, which focuses on addressing the lack of critical human health and environmental effects information on industrial chemicals. Currently there is little information available on the potential hazards of most chemicals used in everyday products and industrial processes.

ChemRTK's High Production Volume (HPV) Program targets the 2,800 chemicals produced in the highest volumes (one million pounds or greater) in the U.S. Working in partnership with industry, the Agency will ensure that basic screening-level data on these chemicals are made publicly available by 2005. ChemRTK will help prioritize EPA's chemical risk assessment and management activities and increase the amount of information on chemical exposures and risks that EPA can provide to the public. Using this information, states, communities, industry, and the public will be empowered to act on their own and in concert with EPA to address risks that may be posed by these chemicals.

Industry response to the HPV Challenge has been overwhelming: more than 460 companies have voluntarily committed themselves to providing EPA with test data for 2,155 chemicals and 187 chemical categories of the 2,800 HPV chemicals. EPA has already commenced its review and public posting of these company submissions. By the end of FY 2002, the Agency expects to have posted test data covering 10 percent of the HPV chemicals. The program received additional funds in 2002 through a Congressional Directive, which is enabling faster progress. EPA is requesting a \$2 million increase in base funding for ChemRTK in FY 2003 to maintain the higher pace and create a better match with the pending industry data



submissions. These additional resources will make it possible for EPA to make 60 percent more data publically available for HPV chemicals, increasing the cumulative number of chemical data postings from 280 chemicals in 2002 to 448 chemicals in 2003 (16 percent of the 2,800 HPV's).

In FY 2002 and 2003, EPA will continue its work under the Acute Exposure Guidelines program to develop and provide key information for assisting communities in identifying and assessing the risks associated with extremely hazardous substances in communities and workplaces at the local level. The purpose of this work is to develop scientifically credible, nationally uniform, short-term exposure limits for a wide range of acutely toxic substances that are protective of the general public, including children, infants, the infirm, and the elderly. At present, substantial information on chronic exposure to ambient levels of industrial chemicals available to assist communities. However, information on the risks to human health from short-term exposure to acutely toxic chemicals is seriously lacking. This information is critical in assisting local communities in the assessment of risks from chemical accidents, chemical terrorism, remediation of superfund sites, and current programs on the destruction of chemical warfare agents.

This project compliments the HPV program by extending the information of that program beyond the identification of acutely toxic substances and the availability of published toxicity data. This program uses sound science to interpret the acute toxicity data and provide meaningful and useful information on the risks, hazards, and safe levels of acutely toxic chemicals. The goal of the program, which commenced in FY 2001, is to provide 15 guidelines for each of approximately 400 acutely toxic chemicals over eight to ten years. In 2001, 75 guidelines were developed for five chemicals; 22 chemicals are targeted for 2002, and 30 in 2003. Increased FY 2002 ant-terrorism funding will enable the development of guidelines for 11 additional chemicals, bringing the FY 2002 targets to 495 guidelines for 33 chemicals. The information will be disseminated through the 50 State Emergency Response Commissions (SERCs) to more than 3500 Local Emergency Planning Committees (LEPCs) established under SARA Title III. The project also will assist communities in chemical emergency prevention under CAAA 112(r) by enabling scientifically credible risk assessments of operations procedures, engineering, design, and construction of local chemical facilities.

This project represents a first-of-a-kind collaborative effort involving scientists and clinicians from both the public and private sectors. It involves the most comprehensive and cost effective data gathering, data assessment, peer review process ever assembled for purposes of establishing exposure limits for hazardous chemicals. This effort is conducted by a Federal Advisory Committee established under the Federal Advisory Committee Act (FACA) representing a cross section of the scientific community in the public and private sectors. The final values are reviewed, approved, and published by the National Research Council of the National Academies.

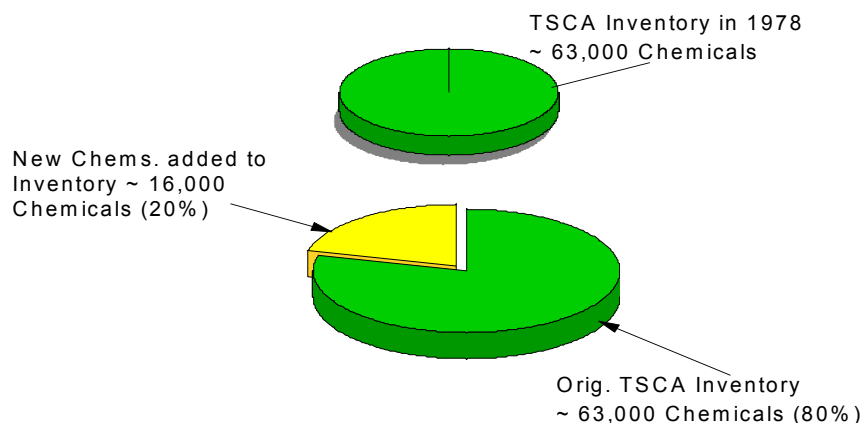
New Chemicals Program

The Toxic Substances Control Act (TSCA) requires EPA to review a chemical or microorganism before it is manufactured commercially (i.e., a "new" chemical) to determine whether it can be handled and used safely. If the Agency determines that an unreasonable risk

may be posed to people or the environment, EPA can block the chemical's entry into commerce or establish control measures to ensure the chemical's safety in the marketplace. Since 1979, EPA has reviewed more than 33,000 pre-manufacturing notifications (PMNs) and taken actions to control risks for about 10 percent of these chemicals and microorganisms.

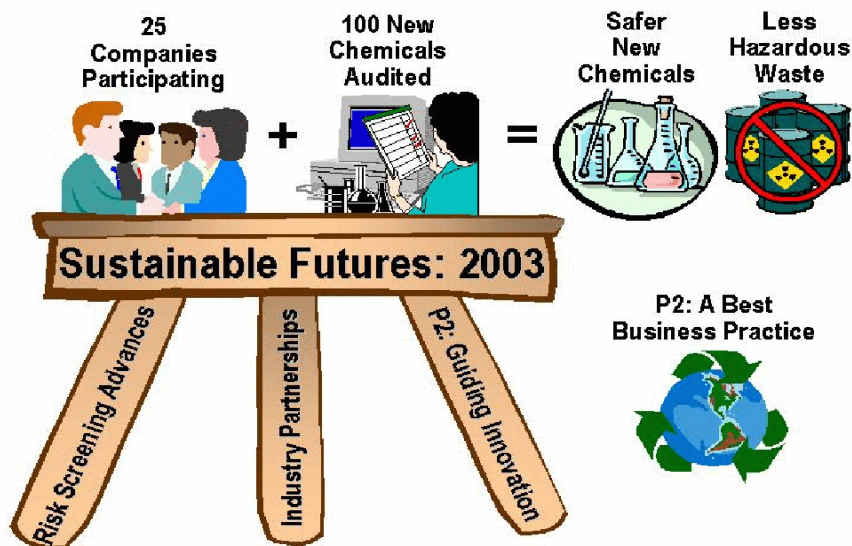
In 2003, EPA expects to receive and assess within the TSCA mandated 90-day review period approximately 1,800 additional PMNs. As part of its review of new chemical substances, the Agency has developed an array of innovative, efficient screening mechanisms. During the new chemical review for commercial chemicals in the process of commercialization, the Agency routinely works with industry to share any options and suggestions it may have on process improvements, or to produce new chemicals more safely. The New Chemicals Program also examines new microorganisms derived from biotechnology to ensure that potential risks have been evaluated and that adequate controls are in place before they are released into the environment. Recent regulatory changes have increased the rate of new biotechnology chemicals submitted for review. Other efforts include outreach and technical assistance to encourage safer chemicals and chemical production and use.

Chemicals on TSCA Inventory in 2001



The chart above indicates substantial progress made in the New Chemicals Program since its inception in 1978. In FY 2001 (partial year, Oct-July), there were potentially 79,120 chemicals in commerce; 16,514 of these chemicals, or 20 percent, had gone through the TSCA Premanufacture Notice review process and entered into commerce following submittal of a Notice of Commencement of Manufacturing. These chemicals have been assessed for risks, and controls are in place as necessary. In recent years, a growing number of these chemicals are becoming "greener" due to several influences. Although the New Chemicals Program has always been inherently a Pollution Prevention (P2) program, it has evolved over the years with an increasing P2 focus. In addition, the New Chemicals Programs continues to coordinate with several voluntary P2 programs such as the P2 Framework, Green Chemistry, Green Engineering, and P2 Recognition Programs (described elsewhere).

In 2002, the Agency plans to launch “Sustainable Futures,” a program which offers an expedited Pre-Manufacturing Notification process to companies who take training in the use of certain screening methods and apply the results toward development of safer chemicals. The Agency, working with others in the scientific community, has developed computerized methodologies that look at the structure of chemicals and estimate potential hazard and risk. The methods, called the Pollution Prevention Framework and the PBT Profiler, can be used to identify hazardous chemicals even before product manufacture begins. EPA is encouraging industry to use




these screening-level tools, used internally by EPA, to evaluate chemical alternatives early in the research and development stage.


In 2001, EPA’s technology transfer efforts introduced these risk-screening methods to industry, and the response was both positive and dramatic. The participating companies have indicated that the methods identified safer alternatives early in the product development cycle, when pollution prevention, product substitution, and risk reduction are most cost effective. The companies also found that the models reduced production costs, shortened time to market, and reduced generation of waste. In 2001, under a pilot program, EPA provided regulatory relief to two companies who used the tools as an integral part of product development. In a win-win result, industry saved time and money and the environment saw inherently safer chemicals. In FY 2002, EPA intends to expand the use of the risk screening tools developed from Project XL to other companies to assist them in selecting safer chemicals for use in their products and processes.

HPV Challenge Program

2800 HPV Chemicals Need Hazard Data
(data as of May 2001)

469 Companies Or Consortia
Voluntarily Committed
To Sponsor HPV Chemicals





Commitments
From Industry
To Sponsor 2155
HPV Chemicals

Assessing Existing Chemicals: The Chemical Right-to-Know Program

One of EPA's critical responsibilities under TSCA is to identify and control any unreasonable risks that might be associated with the thousands of chemicals which are already in commerce. The Agency will complete assessments of Methyl Tertiary Butyl Ether (MTBE), a gasoline additive, and several other chemicals used in a wide variety of commercial products and industrial processes. As described in the request section, EPA's strategy for addressing the remaining chemicals in commerce is to foster the public availability of risk screening information to allow states, communities, industry, and the public to act on their own and in concert with EPA to reduce risks posed by these chemicals through the Chemical Right-to-Know program (ChemRTK).

In FY 2003, the ChemRTK program will continue to review and make publicly available hazard screening data on High Production Volume (HPV) chemicals. While the focus in the early years of program was on evaluating the adequacy of existing data, at this point in the program's evolution, new data generated under the program will now need assessment. HPV chemicals are those that are manufactured or imported into the US in quantities of at least one million pounds per year.

Little hazard information exists in the public domain for many of these chemicals that we use daily. Only seven percent of the 2,800 HPV chemicals have a full set of basic information on health and environmental effects. Only 25 percent of consumer chemicals (those used by children and families in consumer products) have a full set of basic information. In addition, the Agency will continue working with other countries in the Organization for Economic Cooperation and Development's (OECD's) Existing Chemicals Program to further expand the availability of risk screening information.

Without this information, we may not be able to effectively identify and evaluate the human health and environmental risks posed by these chemicals (although the HPV Challenge screening program does not include actual risk assessments on these chemicals). In addition, relatively little is known about the unique effect on children's health of chemicals that are widely used in children's products or otherwise have high potential for exposure to children. At the same time, the design of the ChemRTK program also places an emphasis on reducing the need for additional tests involving animals wherever possible.

Basic screening-level information for all 2,800 HPV chemicals are being made available to the public on an ongoing basis through a voluntary industry challenge and a series of test rules for those data not obtained through the voluntary program. The resulting hazard data are being broadly disseminated to the public in a format that will be easily understood. The response from industry to this initiative has been enthusiastic: 469 companies have sponsored 2,155 chemicals and 187 chemical categories. The Agency intends to further evaluate whether additional assessment is warranted for chemicals to which children are exposed, under a parallel Voluntary Children's Chemical Evaluation Program that will be launched in 2002 (a pilot was started in 2001).

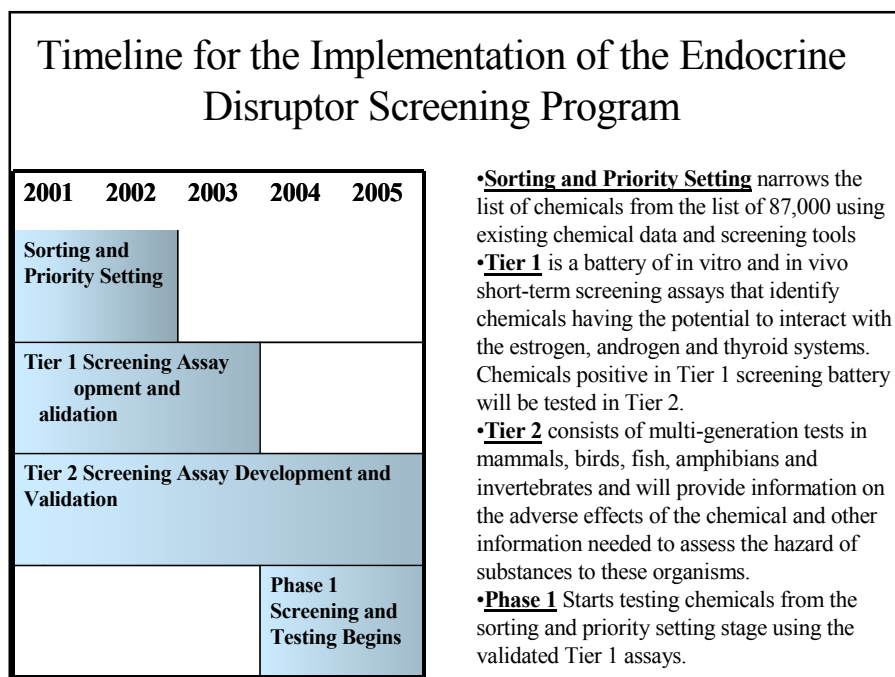
Much of the focus of the Agency in FY 2002 was on assessing the validity of small groups (or categories) of HPV chemicals proposed by industry. Such categories of chemicals can be considered together because of their similar structure or toxicological properties. The Agency continues to be actively engaged in assessing the validity of such categories of chemicals, and allowing the public to access the hazard data on these chemicals as the data are obtained from industry. The requested \$2 million increase in base funding for ChemRTK will bolster our ability to keep pace with industry data submissions, and to increase the cumulative number of chemical data postings from 280 chemicals in 2002 to 448 chemicals in 2003 (16 percent of the 2,800 HPV's).

As new data generated to support these categories become available, in FY 2003, the Agency will shift its focus to evaluating the category analyses submitted by industry sponsors to ensure that the assumptions made in formulating the categories are met and that the use of a category approach to assessing, interpolating and extrapolating the health and environmental effects across the individual chemicals within them is justified. As such, the focus in FY 2003 will be on priority setting, to determine whether further action -- whether it be higher order testing, collection of exposure data to begin an evaluation of risk, and/or risk management action undertaken by the Agency, industry, or the informed public -- is warranted. In addition, efforts to utilize the hazard classification guidelines currently being developed in the OECD will be undertaken. These efforts will be coordinated with a pilot effort now being started in the OECD's Existing Chemicals Program.

The Agency, in FY 2003, will continue to work with stakeholders to explore possibilities for identifying use information. Use information would allow the Agency to identify chemical exposure pathways, better assess risks associated with such exposures, and identify potential unsafe uses of household chemicals and other consumer products.

Endocrine Disruptor Program

There is increasing evidence that fish and wildlife have been affected by chemicals that interfere with the endocrine system resulting in abnormal development, low fertility and greater susceptibility to disease. The link to human disease is less clear at ambient environmental levels, although effects have been observed at high exposure sites.



The Food Quality Protection Act Amendments of 1996 mandated that EPA test pesticides for estrogen effects on human health. The Safe Drinking Water Act Amendments of 1996 permit EPA to test contaminants found in drinking water sources. Given the controversial nature of the endocrine disruptor issue, the Agency established the Endocrine Disruptor Screening and Testing Advisory Committee (EDSTAC) under the Federal Advisory Committee Act. EDSTAC included representatives from industry, environmental and public health groups, academia, and Federal and state government. On the basis of science, EDSTAC recommended that the screening program include: commercial chemicals and contaminants; estrogen, androgen and thyroid endpoints; and wildlife as well as human health effects.

EPA based its EDSP on the EDSTAC recommendations. The EDSP is a two-tiered program. Tier 1 is a battery of in vitro and in vivo short-term screening assays that identify chemicals that have the potential to interact with the estrogen, androgen, and thyroid systems. Chemicals positive in the Tier 1 screening battery will be tested in Tier 2. Tier 2 consists of multi-generation tests in mammals, birds, fish, amphibians and invertebrates and will provide information on the adverse effects of the chemical and other information needed to assess the hazard of substances to these organisms. FQPA mandated that all assays used in the EDSP be validated. Validation is a science-based process and has required application of cutting edge science, domestic inter-agency and international cooperation, and on-going stakeholder involvement. In 2003 EPA will continue to develop and validate Tier 1 and 2 screens and tests. In 2004 EPA will start testing chemicals identified through the Sorting and Priority Setting Stage using validated Tier 1 screening assays.

Research

There are over 70,000 existing chemicals in the Toxic Substances Control Act (TSCA) inventory and an additional 2,000 chemicals are added annually. Each year, 1 billion pounds of active ingredients found in conventional pesticides are applied in the United States. Release of these chemicals into the environment through agricultural and nonagricultural application and other means poses serious risks to both human health and ecosystems. In FY 2003, the Agency will continue to conduct research to reduce risks associated with releases of pesticides and other toxic chemicals and improve the safety of our communities, homes, work places, and ecosystems. This research will include the development and improvement of methods to evaluate hazards on human health endpoints, models to improve the biological basis for human health risk assessment, and methods to identify ecological hazards, predict ecological risk, and characterize environmental stressor interactions.

In addition, the Agency will launch new efforts to address the risks associated with biotechnology. Biotechnology presents a wealth of opportunities from genetically engineered crops to improve productivity, provide resistance to pests and other stresses, and increase nutritional value. But concerns about potential risk and our ability to manage these risks, driven primarily by a lack of information, have created considerable public concern. The research proposed here will provide information needed to evaluate three plausible concerns: 1) potential allergenicity of proteins introduced into the food supply by engineered crops; 2) potential

adverse ecological effects on non-target species; and 3) potential development of pest resistance to the engineered crops.

Human Health Research

Humans are exposed every day to thousands of chemicals individually and/or in multiple combinations through the air, drinking water, food, and dust. The objectives of the human health research program under the Safe Communities goal are to: develop and verify methods to detect, characterize and quantify adverse human health effects that result from exposure to pesticides and other toxic substances; develop and validate models to predict the human health effects of exposure to pesticides and other toxic substances; and provide data on the health effects of selected pesticides and other toxic chemicals, occurring singly or as complex mixtures.

Health effects methods and models research in FY 2003 will continue to focus on development of mechanistically-based predictive models for human health risk assessment, such as structure-activity-relationship models to help determine testing needs under Section 5 of TSCA, which addresses the introduction of new chemicals into commerce. Research will address the needs for methods to evaluate effects associated with a variety of exposure conditions and the special sensitivities of certain subpopulations (including children) based on age, genetic factors, and health status. These methods will be used to evaluate endpoints of toxicity that are qualitatively different from those of concern for the general population.

In FY 2003, EPA will continue to participate in the Agriculture Health Study (AHS) with the National Cancer Institute (NCI), the National Institute for Environmental Health Sciences (NIEHS), and the National Institute of Occupational Safety and Health (NIOSH). The AHS is a large epidemiological study on the health of men and women in agriculture. The primary objective of the EPA exposure study is to collect high quality exposure data that can be used to evaluate how accurately the AHS questionnaire classifies pesticide application activities and enables the prediction of applicator exposure and dose. The Agency will complete sample analysis for the study and initiate data analysis in FY 2003.

The results of the application of methods developed under this research program will significantly increase understanding of the impacts of specific classes of pesticides and toxic substances on human health.

Ecological Research

Over the long term, ecosystem degradation poses one of the most serious risks to human health and economic sustainability. Our nation's ecosystems provide valuable renewable resources such as food, fiber, water storage, and wood. Stresses to the environment can impact these resources as well as critical self-purifying environmental processes. Ecosystems protection research remains a high priority due to the need for better understanding of environmental stressors and their impacts on the health and sustainability of ecosystems. The mechanisms and consequences of changes in the biological, chemical, and physical attributes of ecosystems due to stressors are poorly understood and represent significant challenges to the research community.

In FY 2003, ecosystem effects research will address: 1) the development of appropriate screening and higher tier ecological effects models; 2) the development of pharmacokinetic models to estimate/extrapolate tissue concentration of chemical agents from laboratory test organisms to wildlife species of concern; and 3) the relative influence of exposure to chemicals and other environmental agents, habitat alterations, land use, and the natural variability on sustainability of wildlife populations. Research will also develop and validate predictive models to identify and characterize ecological hazard and risk.

The exposure research program will focus on applying larger-scale risk assessment tools to pesticide and toxic substance issues, and refining existing aquatic exposure assessment models used to assess the impacts of pesticides and toxics on broader scales of ecological organization. Ecological exposure modeling research will develop and validate enhanced probabilistic exposure modules supporting large-scale ecological risk assessments. Analytical methods for chiral pesticides (i.e., organic compounds that have two or more mirror image structures) will be developed and field validated.

Biotechnology Research

Biotechnology, which has applicability to both human health and ecological research, presents a wealth of opportunities from genetically engineered crops to improve productivity, provide resistance to pests and other stresses, and increase nutritional value. However, concerns about potential risk and our ability to manage these risks, driven primarily by a lack of information, have created considerable public concern. New research in FY 2003 will provide information needed to evaluate three significant concerns: 1) allergenicity; 2) potential adverse ecological effects; and 3) enhancing resistance and minimizing or preventing gene transfer.

Allergenicity research will develop models that represent human responses to food allergies and can be used to detect allergenic proteins, identify factors that influence risk, and develop hypotheses that could be tested in human clinical or epidemiologic studies. Research on natural transfer of modified genes and adverse ecological effects will develop probabilistic risk assessment models that measure and simulate gene flow from a herbicide resistant crop to non-target species that may result in herbicide resistant weeds.

Pest resistance and gene transfer research will develop conceptual tools to manage resistance in pests using Bt corn and Bt cotton as prototypes (Bt is a naturally-occurring soil-borne bacterium that is found worldwide; a unique feature of this bacterium is its production of crystal-like proteins that selectively kill specific groups of insects) - the conceptual tools will then be tested under actual field conditions. Test conditions will consist of planting engineered crops and establishing different buffering, rotation, and harvesting schemes. Strong potential exists for resistance management tools to be effective in mitigating the transfer of engineered genes to non-target species. Therefore, research to further develop these tools will be conducted to expand their application to gene transfer management and support the development of the probabilistic risk assessment models, mentioned above.

FY 2003 Change from the FY 2002 President's Budget

EPM

- (+\$2,000,000) Additional funds are requested beyond the FY 2002 President's Budget request for EPA to review and make public the pending increase in toxic chemical testing information being submitted by companies under the High Production Challenge Program, and to implement the Voluntary Children's Chemical Evaluation Program and outreach efforts for the HPV Program.
- (-\$3,000,000) One-year Congressional directed increase above FY 2002 President's budget request.
- (-\$1,102,200, -1.3 FTE) This decrease reflects return to base levels after one-year Emergency Supplemental funding increment.
- (+\$747,000, +3.4 FTE) Shift in FTE and certain overhead costs to better reflect program under GPRA.

Research

S&T

- (+\$4,875,000) This new funding initiative in FY 2003 supports EPA's efforts to address the risks associated with biotechnology. Research will provide sound scientific information required to understand the benefits and the risks of using genetically engineered crops. The research will address three potential areas of risks: allergenicity, gene transfer, and pest resistance. Novel approaches (tools, methods) to assess and manage potential risks from genetically modified organisms (GMOs) will be developed, including: 1) models that represent human responses to food allergies and can be used to detect allergenic proteins; 2) probabilistic risk assessment models that measure and simulate gene flow from a herbicide resistant crop to non target species that may result in herbicide resistant weeds; and 3) conceptual tools to manage resistance in pests initially using Bt corn and Bt cotton as prototypes - subsequent to development, these tools will be tested under field conditions.
- (+\$348,400, +4.0 FTE) This increase enhances EPA's effort in computational toxicology and provides additional research support to the Children's Health Research Program. This research is designed to address the need for methods to evaluate the special sensitivities of children to pesticides and other toxic chemicals. As a result, EPA advances its ability to assess and predict the human health and ecological risks from environmental exposures.
- (+\$123,500, +1.0 FTE) This increase in resources will be used to coordinate EPA scientific participation in regulatory development with program office on major rules.

- (-\$2,389,000, -12.0 FTE) This reduction eliminates funding for FY 2002 Congressionally-directed research.
- (-\$487,500) The FY 2003 Request is \$487,500 below the 2002 Enacted budget due to the Congressional Earmarks received during the appropriations process which are not included in the FY 2003 President's Request.

Annual Performance Goals and Measures

New Chemicals and Microorganisms Review

- In 2003 Of the approx. 1,800 applic. for new chem. and microorganisms submitted by industry, ensure those marketed are safe for humans and the envir. Increase proportion of commer. chem. that have undergone PMN review to signify they are properly managed and may be potential green altern. to exist. chem.
- In 2002 Of the approx. 1,800 applic. for new chem. and microorganisms submitted by industry, ensure those marketed are safe for humans and the envir. Increase proportion of commer. chem. that have undergone PMN review to signify they are properly managed and may be potential green altern. to exist. chem.
- In 2001 EPA reviewed 1,770 Premanufacturing Notices. By the end of 2001, 21 percent of all chemicals in commerce had been assessed for risks.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
TSCA Pre-Manufacture Notice Reviews	1770	1800	1800	Notices
Notice of Commencements	21.0	21.6%	22.3%	NOCs (Cum)

Baseline: In FY 2000, there were potentially 78,598 chemicals in commerce; 15,992 of these chemicals had gone through the TSCA Premanufacture Notice (PMN) process and entered into commerce following submittal of a Notice of Commencement of Manufacturing. These chemicals have been assessed for risks and controls are in place as necessary. A large fraction of these chemicals also may be "green" alternatives to existing chemicals in commerce.

Testing of Chemicals in Commerce for Endocrine Disruptor

- In 2002 Standardization and validation of screening assays.
- In 2001 The two screening assays were not completed.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Screening Assays Completed		1		Screening assay

Baseline: The non-prioritized universe of chemicals that needs to be considered for prioritization includes: pesticide active ingredients, pesticide inert ingredients, chemicals on the TSCA Inventory, environmental contaminants, food additives, pharmaceuticals, cosmetics, nutritional supplements, and representative mixtures. "Priority-setting" refers to the determination of priorities for entry into Tier 1 Screening.

Expand Information on Toxic Substances

- In 2003 Provide information and analytical tools to the public for assessing the risks posed by toxic chemicals
- In 2002 Provide information and analytical tools to the public for assessing the risks posed by the release of toxic substances in communities.
- In 2001 Data was obtained from test plans submitted by industry for 724 chemicals already in commerce

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request
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Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Provide current national risk screening information to the public	1	1		Tools
Completion of community risk identification analyses	2	2		Analyses
Number of initialed/completed risk assessments for chemicals			4	Actions
Complete EPA-HQ risk-based priority setting exercise		3		Analyses
Number of submissions using exposure assessment methods, batabases, and models			80%	Submiss. (cum)
Number of users of exposure assessment methods, databases and models			500	User
Establish state toxics management programs			1	Pilot Programs
Complete EPA risk-based regional office priority-setting system		5		Analyses
Complete state risk-based priority setting exercises		6		Exercises
Expand use of risk screening environmental indicators tools to other countries that adminster pollutant release and transfer registries		1		Country
P2 and Risk Management Guidance Documents		2		Docs./Manual
Training Workshops		1		Workshops

Baseline: Release of national risk screening information first occurred in FY 1999. First community risk identification analyses were completed in FY 2000. First National, Regional, and State level risk-based priority setting exercises will be completed in FY 2002. First expanded use of risk screening tool by other countries will occur in FY 2002.

Risk Screening Environmental Indicators

- In 2003 Reduce by 3.0% cum. hazard-based score for chronic human health calculated for releases and transfers of toxic chemicals reported to TRI from the level calculated for the preceding year, after adjusting for changes in production indices for the manufacturing, mining, and utilities sectors.
- In 2003 Reduce by 4.0% cum. the risk-related score assoc. with air & water release pathways for chronic human hlth calc. for releases & transfers of toxic chem. rptd to TRI from the level calc. for the preceding year,after adjusting for chgs in production indices for the manuf,mining & utilities sectors
- In 2002 Reduce by 1.5% annually, the hazard-based score for chronic human health calculated for releases and transfers of toxic chemicals reported to TRI from the level calculated for the preceding year, after adjusting for changes in production indices for the manufacturing, mining, and utilities sectors.
- In 2002 Reduce by 3.0% annually the risk-related score assoc. with air & water release pathways for chronic human hlth calc. for releases & transfers of toxic chem. rptd to TRI from the level calc. for the preceding year,after adjusting for chgs in production indices for the manuf,mining & utilities sectors

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Reduction in the year 2002 production-adjusted RSEI hazard-based score of releases and transfers of toxic chemicals reported to TRI from the level calculated for 2001 (reported in 2004).		1.5%	3.0%	Index
Reduction in the year 2002 production-adjusted RSEI risk-based score of releases and transfers of toxic chemicals reported to TRI from the level calculated for 2001 (reported in 2004).		3%	4.0%	Index

Baseline: This production-adjusted APG measure is based upon the Risk Screening Environmental Indicators (RSEI) chronic human health risk-related score which is calculated by weighting estimated surrogate doses associated with TRI releases by facilities. The data for 1995 are used as the baseline for this measure.

PBT Profiler

In 2003 Provide industry with user-friendly computerized tools that allow new chemical product alternatives to be evaluated at early stages of design process.

In 2002 Provide industry with user-friendly, computerized tools that allow new chemical product alternatives to be evaluated at early stage of design process.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Number of users of the PBT Profiler		50	100	Users
Number of Chemicals Profiled		500	1000	Chemicals
Number of Companies Participating in Sustainable Futures			25	Participants
Number of Self-Audited New Chemical Product Alternatives			100	Alternatives

Baseline: In FY 2002 the Agency made powerful risk screening software (the P2 framework) broadly available to chemical industry, including providing regulatory relief as an incentive to drive chemical risk screening and P2 outcomes. In FY 2003, the Agency will audit Premanufacture submissions to determine the number of companies participating and the total number of self-audited product alternatives.

Protect from Acute Exposure to Extremely Haz. Chem

In 2003 Establish short-term exposure limits for a wide range of acutely toxic substances that are protective of general public, including children, infants, the infirmed, and the elderly through the Acute Exposure Guideline Levels (AEGL) Program

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Chemicals Addressed by AEGL Program			33	Chemicals
Number of AEGL values generated that will protect workers and general public			495	Values

Baseline: Baseline is 2002; calculation methodology by addition of AEGL values (10 minute, 30 minute, 1 hour, 4 hour, and 24 hour exposure periods) and numbers of chemicals addressed.

Research

Research on Commercial Chemicals and Microorganism

In 2003 Provide a strategic framework for developing an integrated suite of tools that will enhance OPPTS procedures for assessing the risks to human health and ecological systems associated with commercial chemicals, microorganisms, and genetically modified organisms.

In 2002 Develop improved methods and models to evaluate the impact of environmental stressors on human health and ecological endpoints for use in guidelines, risk assessments, and risk management strategies.

In 2001 EPA produced guidance on the use of structure activity relationships, as well as data on exposure of farm applicators to agricultural pesticides to improve the characterization of health risks and reduce community exposures to environmental chemical stressors.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Guidance in the use of Structure Activity Relationships (SAR) computer technologies.	1			guidance
Create searchable database from existing toxicity databases to enable researchers and risk assessors to explore structure-activity associations across toxicity endpoints of regulatory interest.		1		database
Use QSAR models and animal test methods to meet regulatory objectives associated with tiered human health and ecological risk assessments of commercial chemicals,			09/30/2003	methods

Performance Measures:	FY 2001	FY 2002	FY 2003
microorganisms, and GMOs.	Actual	Enacted	Request

Baseline: At present, standard guidelines for test methods and risk assessment methodologies to evaluate the potential risks of environmental stressors to human health and ecological systems are limited to certain endpoints and are generally non-probabilistic in nature. Improved test methods and risk assessment tools will be developed to more accurately predict and fully characterize human health and ecological risks. Improved risk management tools will also be developed that will better identify and reduce environmental exposures to human health and ecosystems.

Verification and Validation of Performance Measures

Performance Measure: TSCA Pre-manufacture Notice Reviews

Performance Database: New Chemicals Management Information Tracking System (MITS), which tracks information from beginning of Premanufacture Notice (PMN) program (1979) to present. Information includes number of PMNs submitted and final disposition (whether regulated or not) and number of low volume and test market exemptions.

Data Source: As industry develops new chemicals, it submits data related to the new chemicals for review to the Agency, including information on chemicals to be manufactured and imported, chemical identity, manufacturing process, use, worker exposure, environmental releases and disposal.

QA/QC Procedures: Local Area Network (LAN) server contains confidential business information (CBI) support documents on each of the chemicals; data undergo quality assurance/quality control by EPA before being uploaded to the LAN. EPA always checks for consistency among similar chemicals in databases.

Data Quality Review: EPA reviews industry data; EPA staff scientists and contractors perform risk screenings and assessments which could lead to regulation.

Data Limitations: None known.

New/Improved Data or Systems: None planned.

Performance Measure: After reviewing submissions from companies, make screening quality health and environmental effects data publicly available for 2,800 HPV chemicals

Performance Database: EPA is developing an electronic chemical right-to-know database system, called the U.S. High Production Volume (US HPV) database, which will allow organized storage and retrieval of all available information on High Production Volume chemicals in commerce in the United States. The US HPV database will be designed to store in a systematic fashion, physical chemistry, fate, exposure, and toxicity data on listed chemicals for Agency and public use.

Data Source: Industry submits test plans and robust summaries of risk screening data in response to the voluntary HPV Challenge program or EPA promulgated test rules.

QA/QC Procedures: Data undergo quality assurance/quality control by EPA before being uploaded to the database. EPA reviews industry submissions of robust summaries of hazard data on individual chemicals and chemical categories, and test plans based on those summaries. EPA determines whether industry data adequately support the summaries and test plans. Data review does not include new information received as a result of new testing.

Data Quality Review: Review of industry data.

Data Limitations: Data are primarily hazard data, not exposure data. Data are suitable to support screening level assessments only.

New/Improved Data or Systems: Data will be integrated with other Toxic Substances Control Act (TSCA) databases into an Oracle environment.

Coordination with Other Agencies

EPA's chemical testing data provides information for the Occupational Safety and Health Administration's (OSHA) worker protection programs, the National Institute for Occupational Safety and Health (NIOSH) for research, and the Consumer Product Safety Commission (CPSC) for informing consumers about products through labels. EPA frequently consults with these agencies on project design, progress and the results of chemical testing projects.

The Endocrine Disruptor program works closely with numerous federal agencies informally and formally through the FACA subcommittee on screening and testing, notably CDC, NIEHS, and NIH.

Research

EPA is among six agencies within the Federal government that conducts intramural human and environmental health research (EPA, National Institute of Environmental Health Sciences, National Cancer Institute/National Institutes of Health, Center for Disease Control and Prevention, Food and Drug Administration, and Agency for Toxic Substances and Disease Registry). The Agency conducts research in all elements of the human health risk assessment paradigm (i.e., exposure, effects, risk assessment, and risk management), making EPA's contribution unique within the Federal government. EPA is widely recognized both nationally and internationally for its work in identifying the relationship between human health effects and exposure to environmental pollutants. Basic research on the mechanisms underlying these effects in combination with problem-driven research programs contribute significantly to the Agency's ability to fulfill its goals and objectives under several environmental mandates.

Collaborations with other Federal and international research organizations create an atmosphere in which the impact of the individual programs is strengthened and the overall positive impact on public and environmental health is significantly increased. In FY 2003, the Agency will continue its cooperation with NCI, NIEHS, and the National Institute for

Occupational Safety and Health (NIOSH) on the Agricultural Health Study, which is a study of the health of men and women in agriculture.

Statutory Authorities

Toxic Substances Control Act (TSCA) section 4 , 5, 6, 8, 12(b) and 13 (15 U.S.C. 2603-5, 2607, 2611 and 2612)

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) sections 3, 4, 5, 6, 11, 18, 24, and 25 (7 U.S.C. 136a, 136a-1, 136c, 136d, 136i, 136p, 136v, and 136w)

Federal Food, Drug, and Cosmetic Act (FFDCA)

Research

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

Toxic Substances Control Act (TSCA)

Federal Food, Drug, and Cosmetic Act (FFDCA)

Environmental Protection Agency

FY 2003 Annual Performance Plan and Congressional Justification

Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

Objective: Ensure Healthier Indoor Air.

By 2005, 16 million more Americans than in 1994 will live or work in homes, schools, or office buildings with healthier indoor air.

Resource Summary (Dollars in Thousands)

	FY 2001 Actuals	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Ensure Healthier Indoor Air.	\$39,190.4	\$39,670.1	\$40,322.7	\$652.6
Environmental Program & Management	\$27,363.8	\$29,843.4	\$30,455.1	\$611.7
Science & Technology	\$3,810.4	\$1,686.8	\$1,727.7	\$40.9
State and Tribal Assistance Grants	\$8,016.2	\$8,139.9	\$8,139.9	\$0.0
Total Workyears	116.4	134.0	132.2	-1.8

Key Program (Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	\$88.8	\$0.0	\$0.0	\$0.0
Air, State, Local and Tribal Assistance Grants: Other Air Grants	\$8,139.9	\$8,139.9	\$8,139.9	\$0.0
Children's Indoor Environments	\$14,714.1	\$13,287.9	\$13,918.4	\$630.5
Facilities Infrastructure and Operations	\$0.0	\$1,799.7	\$1,846.2	\$46.5
Indoor Environments	\$9,241.9	\$9,366.2	\$9,307.6	(\$58.6)
Legal Services	\$85.8	\$92.8	\$103.5	\$10.7
Management Services and Stewardship	\$141.0	\$526.6	\$513.2	(\$13.4)
Radon	\$6,222.7	\$6,453.0	\$6,493.9	\$40.9
Regional Management	\$0.0	\$4.0	\$0.0	(\$4.0)

FY 2003 Request

Health Effects of Indoor Air Pollution

Research conducted by the Environmental Protection Agency (EPA) and others, beginning in the late 1970's, indicates that Americans spend about 90 percent of their time

indoors, where they are exposed to levels of pollutants that are often higher than those outdoors. As a result, indoor air pollution poses high risks to human health, especially to sensitive populations, and has been ranked among the top four environmental risks in relative risk reports issued by EPA, the Science Advisory Board, and several states. Estimates of the economic costs to the Nation of poor indoor air quality, including lost worker productivity, direct medical costs for those whose health is adversely affected, and damage to equipment and materials, are on the order of tens of billions of dollars per year. (Report to Congress on Indoor Air Quality, EPA/400/1-89-001). In 2000, the National Academy of Sciences (NAS) affirmed the significance of indoor triggers of asthma and the alarming increase in asthma rates nationwide (*Clearing the Air: Asthma and Indoor Air Exposures*, (ISBN 0-309-06496-1, January 2000).

Indoor air pollutants continue to have significant impacts in our homes, schools, and workplaces:

- Nearly one in 13 school-aged children has asthma. There is substantial evidence that indoor exposures to dust mites and environmental tobacco smoke (ETS) play a significant role in triggering asthma episodes, and, in some instances, are causally linked to the development of the disease. (Institute of Medicine, National Academy of Sciences (U.S.)). Committee on the Assessment of Asthma and Indoor Air. *Clearing the Air: Asthma and Indoor Air Exposures*. 2000. Washington. National Academy Press.)
- C Asthma's estimated annual cost to the Nation is \$11.3 billion (National Heart, Lung, and Blood Institute, (NHLBI) 1998).
- C Young children are exposed to ETS in approximately 27 percent of U.S. homes, increasing their risk for asthma and causing thousands of lung infections and other diseases. (Results of a national telephone survey entitled "Radon Risk Communication and Results Study," commissioned by EPA in 1994 and 1996. EPA expects updated results in late FY 2002.)
- C A 1995 report by the General Accounting Office (GAO) estimates that 9.9 million students and 570,000 teachers and school staff suffer illnesses annually due to poor indoor air quality in schools. (*School Facilities: Condition of America's Schools, Report to Congressional Requesters, U.S. General Accounting Office, GAO/HEHS-95-61, February 1995 and Condition of America's Public School Facilities: 199, National Center for Education Statistics, Office of Educational Research and Improvement, U.S. Department of Education, NCEs2000-032, June 2000.*)
- C Radon is the second leading cause of lung cancer and is estimated to be responsible for 15,000 to 22,000 deaths per year (BEIR VI, NAS, February 1998). Nearly one out of every 15 homes is estimated to have radon concentrations above the EPA recommended action level. (*National Residential Radon Survey, 1992*)

Indoor Environments Program Strategy

EPA has two major strategies to meet its human health objective for indoor air quality:

- Increase Public Awareness

EPA raises public awareness of actual and potential indoor air risks so that individuals can take steps to reduce exposure. Outreach activities, in the form of educational literature, media campaigns, hotlines, and clearinghouse operations, provide essential information about indoor air health risks not only to the public, but to the professional and research communities as well. Underpinning EPA's outreach efforts is a strong commitment to environmental justice, community-based risk reduction, and customer service. For example, the award-winning media campaign undertaken in partnership with the Advertising Council seeks to educate people about asthma and the role that indoor environmental triggers can play in the worsening of the disease.

- Increase Partnerships

Through partnerships with non-governmental and professional entities, EPA disseminates multi-media materials encouraging individuals, schools, and industry to take action to reduce health risks in their indoor environments. In addition, EPA uses technology transfer to improve the ways in which all types of buildings, including schools, homes, and workplaces, are designed, operated, and maintained. To support these voluntary approaches, EPA incorporates the most current science available as the basis for recommending ways that people can reduce exposure to indoor contaminants.

To reach people at the local level, EPA uses assistance agreements and cooperative partnerships to collaborate with organizations such as the American Academy of Pediatrics, the Asthma and Allergy Foundation of America, the National Association of Counties, the National Association of County and City Health Officials, the National Education Association, the American Lung Association, the Consumer Federation of America Foundation, the National Environmental Health Association, and the National Council of La Raza. These partnerships allow EPA to successfully reach and educate target audiences, which include: health care providers who treat children with asthma, school personnel who manage the environments where children spend many hours each day, county and local environmental health officials, and disproportionately affected and disadvantaged populations. Through this national partner network of over 30 organizations and more than 1,000 local field affiliates, EPA leverages the personnel, expertise, and credibility of these groups to provide the tools to their target audiences, and to the general public, to make informed decisions about reducing health risks in their indoor environment.

EPA will broaden awareness and action through national organizations focused on addressing indoor asthma triggers, as well as other indoor health risks. EPA will partner with other local community-based organizations for implementation. These assistance agreements will provide maximum flexibility for states and communities to design programs that address critical indoor air quality problems, including asthma, mold contamination, and secondhand smoke in homes, in child care and school facilities, and in other residential environments. Some of the residential environments, such as multi-

family, low-income housing, may involve complex issues of control and resources. Schools may have a range of indoor environmental problems that can be addressed through community-based efforts.

Indoor Environments: Children's Health Emphasis

Asthma

Childhood asthma has been characterized by the Centers for Disease Control (CDC) as an epidemic. The number of children with asthma has more than doubled in the past 15 years. During the period 1996 - 1998, an estimated four to six million children had asthma (National Center for Health Statistics, CDC). In 1996, 210,000 hospitalizations for asthma were for children under the age of 18 (National Center for Environmental Health, CDC). From 1977 to 1995, there was a three-fold increase in the number of deaths from asthma, and each year over 10 million school days are missed due to this disease (*President's Task Force on Environmental Health Risks and Safety Risks to Children*, 1999). While there is no known cure for asthma at this time, the medical community agrees, and it is established in national guidelines, that both medical treatment and environmental management are needed to effectively control asthma. However, indoor environmental management is often not practiced and often not part of the prescription for managing asthma. EPA is targeting three primary audiences to help address indoor asthma triggers nationwide: the general public, school and child care communities, and the health care providers.

For FY 2003, EPA is integrating programs across the Agency in an effort to address the serious issue of children's environmental health in schools. The initiative, developed through the Office of Children's Health Protection, includes a cross-media component that will provide comprehensive, easily accessible information and guidance to schools on how to reduce potentially harmful exposures to pollutants in schools. It also includes components designed: to improve indoor air and reduce asthma attacks in schools; to implement integrated pest management programs in schools; and to reduce exposure to lead and mercury in schools.

In FY 2003, EPA will build on the success of its national "Indoor Air Quality (IAQ) Tools for Schools"(TfS) program and expand implementation of this program to many more schools. Adoption of EPA's low-cost/no-cost guidelines for proper operation and maintenance of school facilities results in a healthier indoor environments for all students and staff, but is of particular help to children with asthma, lessening the degree to which they are exposed to indoor asthma triggers. By increasing the number of schools where TfS indoor air quality guidelines are adopted and implemented, healthier indoor air will be provided for over a million students, staff, and faculty. The Agency will continue to promote the adoption of healthy building practices in both existing school operations and in the design and construction of new schools.

Preliminary results, based on feedback from customers, have shown schools and school districts across the Nation are reaping the benefits of improved indoor air quality by successfully implementing the IAQ TfS Kit and Program. To increase awareness of the TfS Program and promote good indoor air quality for schools, the Agency partners with various non-governmental organizations to sponsor an annual schools symposium, bringing together school officials,

nurses, teachers, facility managers, parents, and others to discuss current issues and the potential negative effect poor indoor air quality can have on our children's health. In FY 2001, the IAQ Schools Symposium attracted over 360 participants, exceeding initial projections of 250 participants.

EPA will continue to refine the IAQ TFS training materials as new information becomes available, using customer feedback gathered from school case studies. These case studies describe certain schools' experiences and processes associated with implementing good IAQ strategies and practices, including how different barriers were overcome (financial, legal, managerial, health-related, or community-related) through teamwork and a strong commitment to providing a healthy learning environment for students and staff. Results of the national survey of school operation and maintenance practices conducted in FY 2002 and information gained from EPA's uniform tracking system will be used to further shape program direction for FY 2003.

EPA also will provide funding to introduce school-based asthma education programs, such as the American Lung Association's "*Open Airways*" and the National Association of School Nurses' "*Managing Asthma Triggers: Keeping Students Healthy*," into hundreds of additional schools nationwide, with an emphasis on reaching inner city schools with disproportionately affected populations. These programs teach students with asthma to identify and control their exposure to asthma triggers in their environment and help staff and teachers understand the steps they can take to improve their school's asthma management.

EPA will continue to conduct its national public awareness campaign to enhance the general public's understanding of indoor asthma triggers and the steps they should take to reduce their exposure. Particular attention will be focused on children with asthma, their care givers, low income adults with asthma, and members of the public who, because of their advanced age, are more vulnerable to poor indoor conditions. EPA also will provide support and direction to community organizations serving seniors and community-based asthma intervention groups that educate low-income residents about the environmental components of asthma in residential settings. These efforts are expected to increase the number of Americans educated about IAQ and to spur action on reducing exposure of children and older Americans to indoor air contaminants.

In FY 2003, the Agency will expand its existing efforts to educate affected populations about asthma and how they can identify elements in their settings that may trigger asthma episodes, and address them. Successful interventions continue to be demonstrated by a number of community-based pilot programs (e.g., National Cooperative Inner City Asthma Study, Bureau of Primary Health Care Asthma Collaborative, Centers of Excellence in Children's Environmental Health Research). Those interventions determined to be most effective will be replicated in an attempt to reach increasingly larger audiences with programs tailored to their particular needs, teaching practical skills as well as motivating behavioral change. For example, in FY 2000, the year for which data is the most complete and accurate, the Agency partnered with the Asthma and Allergy Foundation of America to educate more than 800 child-care providers on how to provide a safe and healthy environment for children with asthma and allergies. Combined, these child-care providers administered care for over 9,000 children in FY

2000. Pre- and post-tests indicate a marked improvement in participant knowledge of asthma. As a result of the training, almost 90% of the participants indicated they would make changes in the child-care setting to reduce exposures to indoor asthma triggers, with most planning multiple interventions.

EPA expects, as a result of Agency programs, 834,400 Americans will be living in healthier residential indoor environments in FY 2003. Part of meeting this goal includes the Agency expanding its successful community-based educational partnerships addressing sound indoor environmental management. For FY 2003, the Agency expects to use these partnerships to educate 122,400 people with asthma, and their care-givers, about improved indoor air quality techniques.

The Agency will continue to focus on ways to assist the health-care community to raise its awareness of, and the attention it pays to, indoor asthma triggers and their role in provoking asthma attacks in those with the disease. EPA, in conjunction with the Department of Health and Human Services (HHS), will step up its interactions with managed care organizations to help assess the effectiveness of current asthma care practices and to encourage greater emphasis on avoidance of asthma triggers, as part of a comprehensive asthma treatment regimen. Lessons learned from national and regional forums about how to better integrate medical treatment and environmental management will be a focal point of these interactions.

Environmental Tobacco Smoke

As of 1996, young children were being exposed to ETS in 27% of U.S. homes. ETS exposure increases the risk of lower respiratory tract infections such as bronchitis and pneumonia. EPA estimates that between 150,000 and 300,000 of these cases in infants and children up to 18 months of age are attributable to exposure to ETS (EPA 1992). ETS exposure is causally associated with increased risk of acute and chronic middle ear disease (WHO, 1999). Asthmatic children are especially at risk, as ETS exposure increases the number of episodes and severity of symptoms for up to a million asthmatic children (*Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*, U.S. EPA, 1993 and National Cancer Institute, *Health Effects of Exposure to Environmental Tobacco Smoke, Monograph No. 10*). Recent studies also have suggested links between ETS exposure, sudden infant death syndrome, and low birth weight (National Cancer Institute, *Health Effects of Exposure to Environmental Tobacco Smoke, Monograph No. 10*).

To address this health risk, the Agency will pursue its multi-media campaign on ETS, with a focus on expanding participation in the “Smoke Free Homes Pledge” program, which targets the parents of young children advising them not to expose children to smoke inside the home. EPA will continue with the CDC, states, and local organizations to develop and make available tools and resources which motivate parents and guardians to make their homes smoke-free and to provide support to state and local governmental tobacco control programs to address this issue.

Indoor Environments: Homes, Schools, and Buildings Programs

EPA continues to work toward bottom line results for the Indoor Environments base programs. This includes the number of office buildings managed with good Building Air Quality practices, home radon tests completed, home radon mitigation accomplished, and new homes built with radon-resistant features. EPA provides assistance to the public; to states, Tribes, and other governmental agencies, and to non-governmental organizations to help meet the program's objective to reduce indoor environmental pollutants.

Through the State Indoor Radon Grant Program, EPA provides assistance to the states for the development and implementation of programs to assess and mitigate radon, thereby enhancing the effectiveness of state and local activities for radon risk management. The state grant program helps:

- establish the basic elements of an effective Radon Program in states that have not yet done so;
- support innovation and expansion in states that currently have programs in place; and
- strengthen the Federal/state partnership by helping states develop radon program elements and activities.

In light of changed world events, EPA received numerous requests from building and home owners asking for guidance on how to clean inside buildings, ensure safety, and determine when it is safe to re-enter buildings. EPA, in coordination with the U.S. Department of Health and Human Services (HHS), plans to continue work begun in FY 2002 to develop guidance and training for builders, building owners, managers, and designers on techniques to reduce building vulnerability and effectively respond to chemical, biological, or radiological threats.

Annual Performance Goals and Measures

Healthier Residential Indoor Air

In 2003 834,400 additional people will be living in healthier residential indoor environments.

In 2002 834,400 additional people will be living in healthier residential indoor environments.

In 2001 An additional 890,000 additional people are living in healthier residential indoor environments.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
People Living in Healthier Indoor Air	890,000	834,400	834,400	People

Baseline: 1. By 2003, increase the number of people living in homes built with radon resistant features to 3,635,000 from 600,000 in 1994. (cumulative) 2. By 2003, decrease the number of children exposed to ETS from 19,500,000 in 1994 to 16,889,000. (cumulative) 3. By 2003, increase the number of people living in radon-mitigated homes to 1,625,700 from 780,000 from 1994. (cumulative) 4. By 2003, increase by 122,400 the number of people with asthma and their caregivers who are educated about indoor air asthma triggers.

Healthier Indoor Air in Schools

In 2003 1,050,000 students, faculty and staff will experience improved indoor air quality in their schools.

In 2002 1,228,500 students, faculty and staff will experience improved indoor air quality in their schools.

In 2001 An additional 1,930,000 students, faculty and staff are experiencing improved indoor air quality in their schools.

Performance Measures:	FY 2001	FY 2002	FY 2003	
	Actual	Enacted	Request	
Students/Staff Experiencing Improved IAQ in Schools	1,930,000	1,228,500	1,050,000	Students/Staff

Baseline: The nation has approximately 110,000 schools with an average of 525 students, faculty and staff occupying them for a total baseline population of 58,000,000. The IAQ "Tools for Schools" Guidance implementation began in 1997. For FY 2003, the program projects an additional 2,000 schools will implement the guidance and seeks to obtain implementation commitments from 5 of the 50 largest school districts in the U.S. with an average of 140,000 per district. (Additional, not cumulative since there is not an established baseline for good IAQ practices in schools.)

Verification and Validation of Performance Measures

Performance Measure: People Living in Radon Resistant Homes

Performance Database: Survey

Data Source: The survey is an annual sample of members of the National Association of Home Builders (NAHB), the number of homes they built, and the percent that were built radon resistant. NAHB members construct 95% of the homes built in the U.S. each year. Using a model reviewed by EPA, NAHB estimates the percentage of these homes that are built radon resistant. The percentage built radon resistant from the sample is then used to estimate what percent of all homes built nationwide are radon resistant. To calculate the number of people living in radon resistant homes, EPA assumes an average of 2.67 people per household.

QA/QC Procedures: Because data are obtained from an external organization, QA/QC procedures are not known.

Data Quality Review: N/A

Data Limitations: Because the survey sample does not include builders who are non-members of NAHB, the resulting estimate may underestimate the total number of homes built radon resistant.

New/Improved Data or Systems: None

Performance Measure: People Living in Radon Mitigated Homes

Performance Database: External

Data Source: Radon fan manufacturers report fan sales to the Agency. EPA assumes one fan per radon mitigated home and then multiplies it by the assumed average of 2.67 people per household.

QA/QC Procedures: Because data are obtained from an external organization, QA/QC procedures are not known.

Data Quality Review: N/A

Data Limitations: Reporting by radon fan manufacturers is voluntary and may underestimate the number of radon fans sold. Nevertheless, these are the best available data to determine the number of homes mitigated. There are other methods to mitigate radon including: passive mitigation techniques of sealing holes and cracks in floors and foundation walls, installing sealed covers over sump pits, installing one-way drain valves in untrapped drains, and installing static venting and ground covers in areas like crawl spaces. Because there are no data on the occurrence of these methods, again there is the possibility that the number of radon mitigated homes has been underestimated.

New/Improved Data or Systems: None

Performance Measure: **Children Under 6 not Exposed to Environmental Tobacco Smoke (ETS) in the Home**

Performance Database: National telephone survey of a representative sample of almost 31,000 homes.

Data Source: EPA

QA/QC Procedures: Survey is designed, conducted, and analyzed in accordance with approved Agency procedures.

Data Quality Review: N/A

Data Limitations: Random digit dialing methodology is used to ensure that a representative sample of households has been contacted; however, survey is subject to inherent limitations of voluntary telephone surveys of representative samples. Limitations of phone surveys include: 1) inconsistency of interviewers following survey directions. For example, an interviewer might ask the questions incorrectly or inadvertently lead the interviewee to a response; 2) calling at an inconvenient time. For example, the respondent might not want to be interrupted at the time of the call and may resent the intrusion of the phone call. The answers will reflect this attitude.

New/Improved Data or Systems: None

Performance Measure: **Students/Staff Experiencing Improved Indoor Air Quality (IAQ) in Schools**

Performance Database: Survey of representative sample of schools using commercially available and government databases of private and public schools. The survey will help determine the number of schools adopting and implementing good IAQ practices by using EPA's "Tools for Schools" kit (TfS). The survey is expected to be conducted in 2002 and results are expected in later in the year.

Data Source: EPA-developed questionnaire

QA/QC Procedures: Survey is designed, conducted, and analyzed in accordance with approved Agency procedures.

Data Quality Review: EPA will review the data for completeness and quality of responses.

Data Limitations: Subject to inherent limitations of voluntary telephone surveys of representative samples.

New/Improved Data or Systems: Prior to the survey, EPA simply tracked the number of schools receiving the kit and estimated the population of the school to determine the number of students/staff experiencing improved indoor air quality. With this new survey, EPA is compiling a database to better track the number of schools that have received TfS kits as well as have adopted and implemented good IAQ practices. The database will be complete in late 2002.

Coordination with Other Agencies

EPA serves a unique role in programs related to safety, consumer products, and schools because of its experience and track record in raising public awareness of actual and potential indoor air health risks, in addition to past work on indoor air quality issues associated with consumer products, and its expertise in the areas of indoor air quality in schools. EPA also plays a lead role in the Task Force for Environmental Asthma Issues.

EPA works with Federal, state, Tribal, and local government agencies, industry, non-profit organizations, individuals as well as other Nations to promote more effective approaches to identifying and solving indoor air quality problems. EPA works with the:

- C Department of Health and Human Services (HHS) to develop and conduct programs aimed at reducing children's exposure to known indoor triggers of asthma, including ETS;
- C Department of Housing and Urban Development (HUD) on home safety issues, especially those affecting children;
- C Consumer Product Safety Commission (CPSC) to identify and mitigate the health hazards of consumer products designed for indoor use;
- C Department of Education (DoEd) to encourage construction of schools with good indoor air quality; and
- C Department of Agriculture (USDA) to encourage USDA Extension Agents to conduct local projects designed to reduce risks from indoor air quality.

As Co-chair of the interagency Committee on Indoor Air Quality (CIAQ), EPA works with the CPSC, the Department of Energy, the National Institute for Occupational Safety and Health, and the Occupational Safety and Health Administration to review EPA draft publications, arrange the distribution of EPA publications and coordinate the efforts of Federal agencies with those of state and local agencies concerned with indoor air issues.

Statutory Authorities

Radon Gas and Indoor Air Quality Research Act of Title IV of the Superfund Amendments and Re-authorization Act (SARA) of 1986

Toxic Substances Control Act (TSCA), section 6, Titles II, and Title III (15 U.S.C. 2605 and 2641-2671)

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

Clean Air Act (CAA)

Safe Drinking Water Act (SDWA)

Environmental Protection Agency

FY 2003 Annual Performance Plan and Congressional Justification

Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

Objective: Facilitate Prevention, Reduction and Recycling of PBTs and Toxic Chemicals

By 2005, facilitate the prevention, reduction, and recycling of toxic chemicals and municipal solid wastes, including PBTs. In particular, reduce by 20 percent the actual (from 1992 levels) and by 30 percent the production-adjusted (from 1998 levels) quantity of Toxic Release Inventory (TRI)-reported toxic pollutants which are released, disposed of, treated, or combusted for energy recovery, half through source reduction.

Resource Summary (Dollars in Thousands)

	FY 2001 Actuals	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Facilitate Prevention, Reduction and Recycling of PBTs and Toxic Chemicals	\$41,723.8	\$48,755.4	\$46,115.9	(\$2,639.5)
Environmental Program & Management	\$32,405.1	\$38,761.5	\$36,122.0	(\$2,639.5)
State and Tribal Assistance Grants	\$9,318.7	\$9,993.9	\$9,993.9	\$0.0
Total Workyears	183.3	197.0	196.0	-1.0

Key Program (Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
ATSDR Superfund Support	\$0.0	\$654.3	\$0.0	(\$654.3)
Administrative Services	\$96.7	\$0.0	\$0.0	\$0.0
Congressionally Mandated Projects	\$7,283.7	\$1,700.0	\$0.0	(\$1,700.0)
Design for the Environment	\$4,965.6	\$4,707.6	\$4,810.7	\$103.1
Facilities Infrastructure and Operations	\$0.0	\$2,725.9	\$2,779.1	\$53.2
Legal Services	\$23.1	\$70.2	\$197.8	\$127.6
Management Services and Stewardship	\$77.4	\$478.6	\$493.4	\$14.8
New Chemical Review	\$1,604.3	\$1,611.6	\$1,606.4	(\$5.2)
PBTI	\$2,455.1	\$2,572.5	\$2,580.5	\$8.0
Pollution Prevention Incentive Grants to States	\$5,986.3	\$5,986.3	\$5,986.3	\$0.0
Pollution Prevention Program	\$10,066.4	\$9,597.8	\$9,902.8	\$305.0
RCRA State Grants	\$3,066.2	\$4,007.6	\$4,007.6	\$0.0
RCRA Waste Reduction	\$11,689.0	\$14,633.7	\$13,740.7	(\$893.0)
Regional Management	\$8.8	\$9.3	\$10.6	\$1.3

FY 2003 Request

Pollution prevention (P2) is designed to prevent contaminants from entering the environment, in contrast to risk management and remediation, which are designed to control pollutants that have already been introduced. Under the Pollution Prevention Act of 1990 and its directive that “pollution should be prevented or reduced at the source whenever feasible,” P2 and source reduction became the Agency’s preferred approaches to environmental protection. Compared to approaches that control, treat, or clean up pollution, P2 can sometimes be more effective in reducing potential health and environmental risks to the extent that it may:

- reduce releases to the environment;
- reduce the need to manage pollutants;
- avoid shifting pollutants from one media (air, water, land) to another; and
- protect natural resources for future generations by cutting waste and conserving materials.

Preventing pollution can be cost-effective to industry in cases where it reduces excess raw materials and energy use. P2 can also reduce the need for expensive “end-of-pipe treatment” and disposal, and support quality improvement incentives in place at facilities. Current EPA strategies include institutionalizing preventive approaches in EPA’s regulatory, operating, and compliance/enforcement programs and facilitating the adoption of pollution prevention techniques by states, Tribes, the academic community and industry. EPA uses market incentives, environmental management tools and new technologies to promote wider adoption of P2 measures.

Much progress has been made in carrying out these strategies, though more work remains. Perhaps the fastest growing opportunities lie in private sector partnerships, which enable EPA's knowledge of P2 principles and techniques to be combined with industry-specific expertise in production and process design. Another opportunity for building P2 practices into industrial operations lies in partnerships with the academic community. By developing and providing educational tools for universities to train the next generation of engineers, we plant the seeds needed to replicate P2 practices throughout industry.

FY 2003 Key Program Activities

In FY 2003, EPA will work to achieve the pollution prevention objective by pursuing a coordinated set of activities, tailoring programs and projects to the concerns and interests for each arena. Every type of organization and each individual consumer has a part to play in preventing pollution. P2 approaches can be flexibly applied to most endeavors. The Agency will promote effective pollution prevention through the following programs and activities:

Pollution Prevention Program

(a) *Sustainable Business Practices.* Businesses can sometimes reduce costs significantly by implementing effective P2 programs. Sometimes the savings are not readily apparent because of the structure of the company’s internal accounting system. The Agency will play a role in

encouraging businesses to modify their management accounting systems to fully and explicitly account for environmental costs. These strategies are designed to improve the current business management framework in ways that will enable companies to more easily choose prevention practices. The Agency will develop Sustainable Business Franchises to provide corporations with a fully developed, self-sustaining module for the delivery of environmental technical assistance.

(b) Government Actions. The Agency is invested in sharing information and supporting State programs on Pollution Prevention. During FY 2003, State Program Support will include management of the Pollution Prevention Incentives for States (PPIS) grants (discussed later in this objective); P2 Results; and support of the National Pollution Prevention Roundtable. In the area of Information Sharing, EPA will continue funding the Pollution Prevention Information Clearinghouse and management of the highly successful Pollution Prevention Resource Exchange.

(c) Safer Products. EPA has the lead in implementing the Pollution Prevention Act (PPA) and in carrying out Executive Order 13101 and its predecessor, Executive Order 12873, section 503. The PPA requires EPA to “identify opportunities to use Federal procurement to encourage source reduction.” These orders require the Federal government to use its purchasing power - about \$200 billion in goods and services each year - to create a demand for products and services that have a reduced impact on the environment (i.e., environmentally preferable products, or EPPs). The Agency finalized guidance in 1999 to help executive agencies identify and purchase environmentally preferable products and services. In FY 2003, EPA will expand demonstration projects to include electronic products and partnership opportunities with the Department of Interior. Program activities for FY 2002 include the development of tools to assist government purchasers in making environmentally preferable purchases. Additionally, the Agency will conduct a benchmark measurement of the performance and extent to which government purchasers are actually making environmentally preferable purchases.

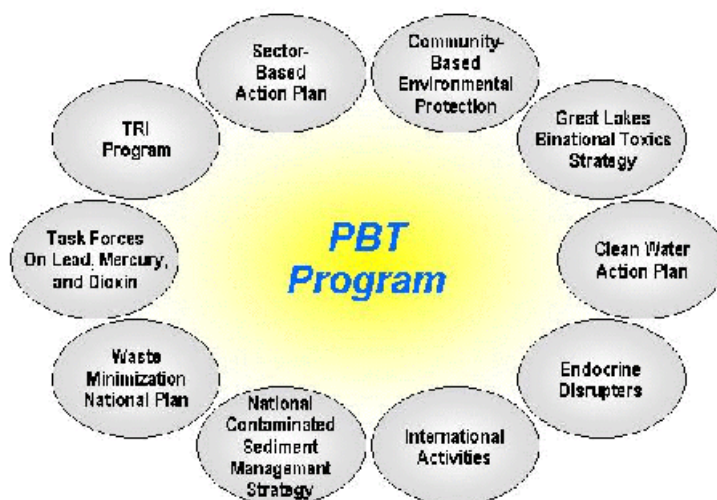
EPA is moving forward with efforts to provide information consumers can use to make environmentally friendly choices, through the use of Environmentally Preferable Products (EPP). The Consumer Labeling Initiative (CLI) is designed to improve household product labels to better present environmental, safe use, health, and other information. Proper labeling is especially important for products that are used by or around children, so that parents can evaluate potential risks to children from possible exposure to toxic chemicals. During FY 2003, the CLI program will work specifically with Federal and local governments, States, and community organizations to broaden its public outreach on *Reading the Label – First*, encouraging consumers to read the product label prior to purchase and use.

(d) PBT Program. The Agency is concerned about persistent, bioaccumulative and toxic (PBT) substances, such as mercury, dioxin, and DDT, because these pollutants persist in the environment and can build up to high concentrations in human and animal tissue. Some PBTs can cause developmental and neurological defects in fetuses and young children and some are also suspected endocrine disruptors.

Pollution Prevention Incentive Grants to States

The States are the primary sources for businesses and communities that are seeking assistance in identifying and applying prevention approaches. EPA has provided seed money to help states promote innovation and develop state capacity. The PPIS grants foster the development of new P2 approaches by providing funds to states in the areas of technical assistance and training, education and outreach, regulatory integration, demonstration projects, legislative activities and awards programs. Another key program for states, the Pollution Prevention Resource Exchange, helps to support technical assistance organizations by coordinating the development and dissemination of up-to-date information on P2 approaches.

PBT Program Connections



To address continuing issues associated with PBTs, EPA launched a cross-office, cross-media PBT program in FY 1999. Through this effort, the Agency seeks to prevent, minimize and, when possible, eliminate PBTs which are harmful to both human health and the environment. The initiative's cross-media approach is designed to stop the transfer of PBT pollutants across media using all of EPA's tools: regulatory, compliance assistance, enforcement, research, voluntary actions, prevention, and international negotiations. The PBT program fosters cross-agency collaboration on activities related to priority PBTs by building on actions by individual national program offices and regions, and by providing resources for priority PBT activities that further this agency-wide effort.

In FY 2003, the Agency will be implementing its Mercury National Action Plan, focusing on seven key priority areas. Critical measurement and monitoring efforts will be in their third year; facilities will be collecting PBT chemical release data under the new TRI rule, and submissions under TSCA for approval of new PBT chemicals for entry into commerce—these activities will be under close scrutiny. New activities for FY 2003 will include:

- Developing cross-cutting action plans for PBT monitoring and risk communication;
- Increasing the focus on regional/state implementation projects;
- Emphasizing dioxin and continuing emphasis on mercury and PCBs; and
- Reviewing the results from major measurement, monitoring and data collection efforts.

Design for the Environment and Other Programs

One of the Agency's key P2 industry sector-based programs focuses on fostering cleaner technologies and the reduction of potential risks to health and the environment through the adoption of safer chemicals and workplace practices. EPA's Design for the Environment (DfE) Program works in partnership with industry sectors to develop comparative risk, performance, and cost information about alternative technologies, chemicals, and processes to better aid industry in making environmentally-informed decisions. Through this program, EPA has entered into long-term partnerships with more than 15 industries, including printing and graphics; textile and garment care; electronics and computers; automotive manufacturing, repair, and refinishing; industrial and institutional laundries; foam furniture manufacturing; paints and coatings; and others.

DfE partnership projects support the reduction of risks to health and the environment through the development of a better understanding of workplace and environmental hazards, through identifying incentives to encourage the adoption of safer workplace practices, and through providing technical support towards the redesign of safer chemicals, mixtures, formulas, products, and technologies. DfE partnerships have begun to see changes in either the use of chemicals or workplace practices in industrial and institutional laundry product formulations, dry-cleaning and garment care, automotive refinishing practices, printing processes, and in the electronics industry.

DfE has completed comparative assessments on over 800 chemicals and continues to evaluate several hundred additional chemicals each year. The switch to alternative cleaner, safer chemistries and/or the adoption of P2 practices in the workplace can result in the reduction of the use of hazardous chemicals. These use reductions will translate into lower quantities of hazardous chemicals released, disposed of, treated, or combusted for energy recovery; contributing to the overall objective of achieving a 20 percent reduction in such quantities.

DfE's partners in the flexographic ink, electronics, and automotive refinishing industries completed the multi-year technical portion of the partnership project during FY 2001 while outreach activities continue through 2002. In 2003, DfE will investigate the feasibility of technology transfer of DfE "lessons-learned" to additional industries. For example, EPA will work with other industries that employ spray application practices and use chemicals similar to those found in the collision repair industry.

In 2003, EPA intends to continue with new DfE partnership activities launched in 2002 in the marina and the electronics industries. The new DfE electronics industry partnership focuses on life cycle impacts of lead solder and its alternatives. The continual partnership with the electronics industry and the expansion to new areas of investigation is valued by both DfE and the partners, particularly for this industry which faces rapid and continuous change. The DfE

formulator initiative will also reach new industries in 2002 and 2003. The formulator initiative will be expanded beyond the original industrial laundry sector partnership in 2001 to include cleaning products and fragrances. In 2002, DfE will begin to place greater emphasis on working with the Regional and State P2 Programs to incorporate DfE strategies and goals into regional-based projects. The DfE Program will maintain a leadership role but will serve more as a technical and communications guide to regional and state partners. DfE will look to the Regional and State P2 programs to identify critical areas of concern and opportunities for integrating DfE concepts. The DfE Program will promote the use of its approaches including, substitutes assessment, life cycle analysis, best management practices and EMS sector strategies. The DfE program will pilot a stronger Regional program in FY 2002 through collaborative projects with EPA Regions 6 and 9.

The focus of the Green Engineering Program (GE) is on education. Green Engineering aims to educate senior-level undergraduates as well as graduate students in engineering to build P2 principles into the design and operation of industrial processes. EPA has developed a Green Engineering textbook and other educational materials. Several schools have already used the draft manuscript in their classes as a primary textbook. EPA is working with the American Society of Engineering Education (ASEE) to further disseminate GE information to engineering schools. In 2002, there will be Green Engineering Tract at the Summer American Society of Engineering Education (ASEE) Conference.

The Buy Clean program applies Environmentally Preferable Purchasing principles to indoor environmental quality, with an emphasis on its potential to reduce risk to schoolchildren from exposure to indoor air pollutants. In 2002, EPA will fully implement the one-year pilot grant program to test Buy Clean in schools across the country. In 2003, EPA will finalize and distribute the case studies from the pilot Buy Clean projects and recognize the accomplishments of the schools which participated in the pilot.

The pollution prevention approaches discussed above are intended to provide assistance and incentives to various sectors of society to promote new habits and new ways of doing business that are sustainable, cost-effective and beneficial to the environment. These activities can promote greater ecological efficiency and therefore help to reduce the generation and release of production-related waste.

Green Chemistry

The Pollution Prevention Act not only established a national policy to prevent or reduce pollution at its source, it also provided an opportunity to expand beyond traditional EPA programs and devise creative new strategies to protect human health and the environment. Green chemistry, or the design of chemical products and processes that eliminate or reduce the use or generation of hazardous substances, is a highly effective approach to pollution prevention because it applies innovative and cost-effective scientific solutions to real-world environmental problems, all through voluntary partnerships.

The goal of the Green Chemistry Program is to promote the research, development, and implementation of innovative chemical technologies that eliminate or reduce hazardous

substances during the design, manufacture, and use of chemical products and processes. More specifically, the Green Chemistry Program supports fundamental research in the area of environmentally benign chemistry as well as a variety of educational activities, international activities, conferences and meetings, and tool development. Green Chemistry partners include industry, trade organizations, academia, scientific societies, and other state and federal government organizations.

The Green Chemistry Challenge Program continues to be effective at catalyzing the behavioral change necessary to drive the research, development, and implementation of green chemistry technologies. In addition, this program also continues to provide an opportunity to quantitatively demonstrate the technical, environmental, and economic benefits that green chemistry technologies offer. In recent years, the program has made significant progress in several areas including 1) broad, competitive, non-target research efforts, 2) education activities, 3) recognition efforts, and 4) international initiatives. In 2003, the Green Chemistry Program will also be focusing its outreach, awards, and research efforts to target 1) audiences not currently involved in green chemistry product and process design and 2) specific high priority chemicals, products, and/or processes for which safer alternatives are not available.

Resource Conservation and Recovery Program

Pollution prevention and safe recycling are two of the nation's best tools for environmental protection. Well implemented, systematic source reduction and recycling programs solve waste management problems at their source, lowering pressure on the environment and reducing energy use at a number of critical points - production of raw materials, subsequent processing into finished products, and eventual transport and disposal at a waste management facility. At the same time, the best programs save industry and government money.

The Resource Conservation and Recovery Act (RCRA) directs EPA to promote a reduction in the amount of waste generated and to improve recovery and conservation of materials through recycling. The RCRA program emphasizes a national policy focusing on a hierarchy of waste management options that advocates source reduction, reuse and recycling over treatment and disposal. In the 1990 Pollution Prevention Act, Congress codified this hierarchy of waste management options, reaffirming the need for source reduction and recycling programs for both hazardous and municipal solid wastes.

The waste reduction activities in this objective include:

- fostering partnerships with states;
- working with Tribes and local communities;
- carrying out plans to reduce toxic chemicals in industrial hazardous waste streams;
- defining techniques to reduce the generation of municipal, hazardous and other solid waste through pollution prevention;
- and developing methods to increase hazardous and municipal solid waste recycling.

In the hazardous waste arena, the Agency complements its regulatory control program with a strong emphasis on developing waste minimization partnerships with industry to reduce the generation of wastes that are most harmful to human health and environment. The RCRA program will find ways to reduce the presence of chemicals of concern in waste by emphasizing voluntary partnerships with states, industry and communities.

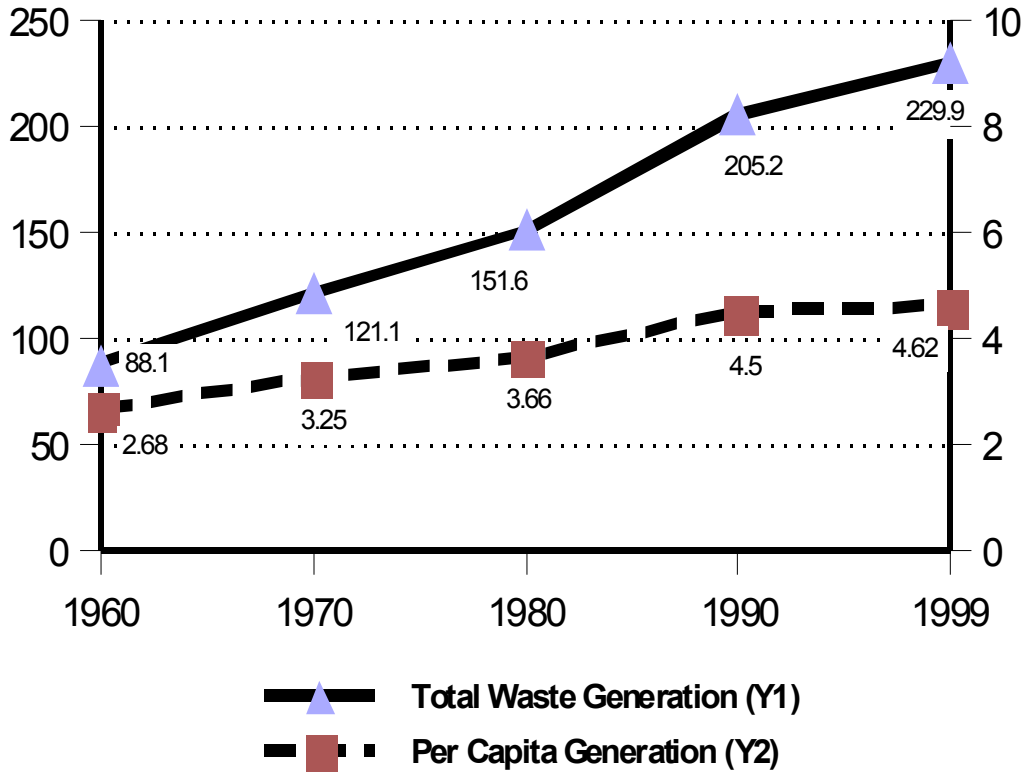
In FY 2003, EPA will focus its efforts on the implementation stage of its program to reduce hazardous wastes containing priority chemicals. EPA will sponsor industry workshops, encourage increased technical assistance and information sharing, and publicly recognize industry leaders. For example, EPA is exploring a partnership with the primary aluminum industry to work towards mutual goals of waste and energy reductions. Regional and state staffs will encourage partners and aid in identifying waste minimization goals and avenues for achieving them cost-effectively.

EPA will continue to respond to court decisions concerning its jurisdiction over recycling secondary materials in FY 2003. As part of this effort, the Agency will be working toward removing regulatory barriers to safe hazardous waste and materials recycling and promoting ways to improve and encourage recycling. This effort will consider both regulatory changes and non-regulatory approaches.

In FY 2003, the Agency will investigate further opportunities to increase the rate of hazardous waste recycling. This exploration will include Regional and state collaboration to clarify or revise existing policy related to recycling. EPA will also work with industry to test alternative regulatory requirements that promote recycling, such as revising the regulations governing metal finishing sludges. EPA expects state partners to implement projects through a process developed jointly by Environmental Council of States (ECOS) and EPA, as demonstrated by the Region III states' electronics recycling project. These projects are likely to focus on testing alternatives to current regulations that show promise for increasing recycling without compromising human health and the environment. EPA also expects to collaborate with partners in various regulated sectors, such as, academic research institutions, to revise regulations and policies to encourage environmental stewardship and reduce hazardous waste generation.

In addition, the Agency remains committed to reducing regulatory burden. In FY 2003, EPA plans to promulgate rule changes that will reduce the paperwork burden associated with the RCRA program and further streamline RCRA data collection. Every two years, EPA and forty-nine states and territories must use the Biennial Reporting System (BRS) to interact with 20,000 entities for collection of basic information on waste generation and management, in accordance with RCRA Section 3002. BRS costs implementing agencies an aggregate of \$7.7 million, and imposes 195,000 hours of burden and \$10 million in cost annually on the regulated community. Currently, changes have been incorporated to facilitate electronic data submissions and to simplify the BRS forms. In FY 2003, EPA and its state partners will explore the cost effectiveness of alternatives to BRS, such as integrating regulatory requirements with firms' existing operational and financial data systems, increasing reliance on data from the Toxics Release Inventory, and conducting periodic surveys of the largest hazardous waste generators in lieu of the entire BRS.

Figure ES-1: Waste Generation Rates From 1960 to 1999



Waste reduction has clear benefits in combating the ever-growing stream of municipal solid waste (MSW). Annual generation of MSW grew steadily from 88 million to 230 million tons between 1960 and 1999. MSW includes waste generated from residences, commercial establishments, institutions, and industrial non-process operations. EPA’s municipal solid waste program provides national leadership, technical assistance and outreach for businesses, industry, and municipalities implementing source reduction and recycling systems in their plants, facilities and communities. This also includes states and Tribes whose laws provide the structure for these activities. The program implements a coordinated set of strategies to manage wastes, including source reduction (also called waste prevention), recycling (including composting), combustion, and landfilling. Preference is given to strategies that maximize the diversion of waste from disposal facilities, with source reduction (including reuse) as the highest priority, followed by recycling.

In support of EPA’s retail theme, the Agency plans to increase consumer and individual awareness of environmental issues by initiating an environment retail effort in FY 2003. Although the focus is on the “point of purchase”, the retail initiative will target consumer products such as compact disks (CDs), as well as company systems and industrial processes. By

focusing on a product, EPA can then direct the consumers' attention to product stewardship, design, materials use, supply chains and encourage reuse/remanufacturing/recycling when a product has reached its useful life. In FY 2003, the Agency will be well on the way in to making substantial progress with our governmental and business partners in voluntary negotiations to increase the recovery of end-of-life electronic products. Participants in an EPA supported series of voluntary discussions involving electronics manufacturers, recyclers, retailers, states and local governments and non-governmental organizations will develop national solutions for increasing the rate of electronic product recycling. EPA will support pilot programs that further the e-recycler initiative. In FY 2003, EPA will sponsor a series of regional pilot projects to test and gather data on various approaches to collect used electronics, and will work with manufacturers in the design stage to improve the environmental performance of their products. In addition, the Agency will aid the implementation of new national collection initiatives, launched as a result of prior year product stewardship dialogs; document and disseminate results from the many electronics pilots currently underway; coordinate with many international electronic initiatives; and spearhead more aggressive Federal green procurement and contracting for electronics.

There is a need to ensure that recovery is performed in a safe and environmentally sound manner as electronic products become more routinely reused and recycled. In FY 2002, EPA worked with the Organization for Economic Cooperation and Development (OECD) to develop draft guidance identifying safe practices for dismantling and recycling end-of-life electronics. In FY 2003, the Agency will also continue efforts to develop and update guidance for safe, effective recycling of these materials. Since many of the markets for used electronic materials are international, EPA will continue to work with OECD on environmentally sound methods for recycling used electronics.

In FY 2003, the Agency will continue to partner with government agencies, Tribes, non-profit organizations, business, and industry to advance toward the national goal of 35 percent municipal solid waste recycling by FY 2005. The Agency will share technical information through satellite broadcast forums, workshops, training, and outreach materials. These efforts will help local governments assess progress by applying EPA's Source Reduction Measurement Methodology and establish equitable and fair "Pay-As-You-Throw" fee systems for solid waste services. The Agency will participate in voluntary programs like WasteWise and engage in discussions with business, industry, and government agencies, to show them how they can help achieve the national recycling goal. EPA will focus on materials that are difficult to recycle and materials that are generated in large quantities including construction and demolition debris, electronics, food waste, tires, plastics and carpet.

In FY 2003, WasteWise will emphasize new initiatives to encourage partners to consider (1) innovative alternatives to traditional disposal contracting, such as "Resource Management," an approach pioneered by General Motors, which strengthens economic incentives for waste reduction and resource efficiency while saving money, and (2) "Green Building" approaches to building construction and demolition, which reduce waste and boost recycling. Additionally, the WasteWise program will seek additional federal sector partners to promote source reduction, recycling and buy-recycled programs. EPA expects dozens of additional partners as a result of increased compliance with RCRA §6002, which requires federal agencies to buy products made

with recycled content. Regional staff will recruit new partners and will provide technical assistance to them.

The WasteWise Federal sector focus supplements EPA's issuance of additional Comprehensive Procurement Guidelines (CPG), which establish guidelines for Federal and state purchasing, that help improve the market for products made from materials recovered from the solid waste stream. These efforts foster implementation of Executive Order 13101, which requires Federal agencies to reduce waste, reuse materials and recycle. Currently, the CPG lists over 50 products, such as industrial drums, carpet cushion and park benches and soon government agencies might find themselves purchasing recycled content office furniture, roofing materials and nylon carpet, among other items. Continuing advancements in technology development will increase the number and quality of recycled content products in the CPG.

One effort that has built momentum both internationally and domestically is *Extended Product Responsibility* (EPR). By engaging in discussion with product manufacturers, EPA encourages them to evaluate the life cycle impacts of their product so that product design and manufacturing can be modified to reduce impacts on the environment. In FY 2003, the Agency will encourage product manufacturers to determine what their appropriate role is in the recycling of their products at end-of-life. EPA has witnessed substantial engagement by electronics and carpet manufacturers in voluntary EPR discussions this past year. For example, EPA, the carpet industry's trade association, major manufacturers, as well as participating state and regional governments signed a Memorandum of Understanding that 1) establishes a dramatic new national goal for recovery of used carpets; 2) creates a new industry-funded organization to support the development of recycling infrastructure, and; 3) provides for government procurement and market development initiatives to support this undertaking. EPR is a broad-reaching environmental principle that will complement environmental programs across the Agency.

EPA will work closely with the network of state and Tribal recycling and economic development officials created through our Jobs Through Recycling (JTR) program. This program has provided significant assistance to entrepreneurs creating or expanding recycling businesses throughout the country. During FY 2003, the JTR program will continue to help quantify and communicate the employment and financial impacts of recycling businesses.

FY 2003 Change from the FY 2002 Enacted

EPM

- (-\$2,950,00) The FY 2003 request is \$2,950,00 below the FY 2002 Enacted budget level due to Congressional earmarks received during the appropriations process that are not part of the FY 2003 President's request.

Annual Performance Goals and Measures

Green Chemistry Challenge Awards

In 2003 Continue to stimulate development of new safe ("green") chemicals and safe chemical processes through public recognition for outstanding achievements in this field.

In 2002 Continue to stimulate development of new safe ("green") chemicals and safe chemical processes through public recognition for outstanding achievements in this field.

In 2001 The program received information on a total of 75 processes/products.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Alternative feed stocks, processes, or safer products identified through Green Chemistry Challenge Award	75	110	160	Prod/proc (cum)

Baseline: Baseline is zero in FY 2000.

Toxic Release Inventory (TRI) Pollutants Released

In 2003 The quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery in 2003, (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2002. This data will be reported in 2005.

In 2002 The quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery in 2002, (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2001. This data will be reported in 2004.

In 2001 No conclusions can be drawn regarding changes in TRI Non-recycled wastes from calendar year 2000 to calendar year 2001 without data.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Reduction of TRI non-recycled waste (normalized)	not available	200 Million	200 Million	lbs

Baseline: This APG measures changes in TRI Non-Recycled Wastes. TRI data are reported to EPA by facilities by July 02, and compiled and reported publically by EPA in Spring 03. EPA will do an analysis to determine a new target.

Managing PBT Chemicals

In 2003 Initiate further actions pursuant to PBT Strategy and Level I PBT National Action Plans including a plan to address unique environmental health threats to Tribes and special populations.

In 2002 Initiate further actions pursuant to PBT Strategy and Level I PBT National Action Plans including a plan to address unique environmental health threats to Tribes and special populations.

In 2001 15 new PBT prevention / reduction projects initiated through regional offices in 2001. The list of additional priority PBTs was not published.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Number of prevention and reduction Regional projects initiated.	25	35	45	Grants (Cum)
Publish final list of additional priority PBTs.	0			List
Hospital Mercury Project		200	100	Participants
Number of New Multiple-PBT Strategies Completed		2		Strategies
Tribal PBT Actions			4	Grants

Baseline: Level II chemicals: For PBT risk reduction projects, the baseline is zero projects in FY 1999. Final List of Priority PBTs: The baseline for hospital mercury project is under development. The baseline for number of new multiple-PBT strategies completed is zero in 2001.

Safer Alternative Cleaning Technologies

- In 2003 Expand the use of cleaner technologies in priority industries, including reduction in the use of perchloroethylene from 1997 levels.
- In 2002 Expand P2 practices in the garment care industries by achieving a reduction in the use of perchloroethylene by the dry-cleaning industry from the 1997 levels.
- In 2002 Expand the use of cleaner technologies in priority industries.
- In 2001 EPA continued to work with industry on reducing the use of the highly toxic chemical perchloroethylene in the dry cleaning industry.
- In 2001 The market share for cleaner inks is 6 percent. The market share for cleaner adhesives increased to 65%. In FY2001, EPA established partnerships with 8 detergent formulation industry entities, including 15 formulations.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
For inks, track size of flexographic ink industry and market share (\$ and lbs) of cleaner inks.	6%	15% (cum)	15% (cum)	Market share
For adhesives, track size of cleaner adhesive industry market share.	65%	70% (cum)	70% (cum)	Market Share
For eco-friendly detergents, track the number of laundry detergent formulator industry partners.	18	12	12	Partners (cum)
Perchloroethylene reduction	not available	38%	40%	Use Reduct cum
Regional project to expand the use of cleaner technologies		15	20%	Projects (cum)

Baseline: In 1997, 83 million pounds perchloroethylene (perc) used; in 1998, 72 million pounds of perc used; in 1999, 63 million pounds of perc used.

Eco-friendly detergents baseline is 1997: 0 partners and 0 detergents. The adhesives baseline is 1997 which reflects the beginning of tracking market share -- the measure is the increase in market share from the baseline. Baseline for flexographic inks measure is 1998 which reflects the beginning of tracking market share.

Reducing PBTs in Hazardous Waste Streams

- In 2003 Reduce waste minimization priority list chemicals in hazardous waste streams by 43% to 86 million pounds by expanding the use of state and industry partnerships and Regional pilots
- In 2002 Reduce waste minimization priority list chemicals in hazardous waste streams by 40% to 91 million pounds by expanding the use of state and industry partnerships and Regional pilots.
- In 2001 A draft trends report that shows changes from 1991 to 2000 was prepared in FY 2001 and is currently undergoing intergovernmental review.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Prepare a trends report that shows Toxic Release Inventory changes from 1991 to 1998.	1			report
Reduction in generation of priority list chemicals from 1991 levels.		40	43	percent

Baseline: 1991 Toxic Release Inventory data will be used to determine reductions.

Municipal Solid Waste Source Reduction

- In 2003 Divert an additional 1% (for a cumulative total of 32% or 74 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day.
- In 2002 Divert an additional 1% (for a cumulative total of 31% or 69 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day.

In 2001 FY 2001 data is not available for the diversion of municipal solid waste from land filling and combustion or maintaining per capita generation of RCRA municipal solid waste. Analysis of FY 2001 data is anticipated by September 2003.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	
Millions of tons of municipal solid waste diverted.	not available	69	74	million tons
Daily per capita generation of municipal solid waste.	not available	4.5	4.5	lbs. MSW

Baseline: 1990 levels established at 17% of MSW diverted and 4.3 pounds MSW per capita daily generation.

Verification and Validation of Performance Measures

Performance Measure: The quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery in 2003, (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2002. This data will be reported in 2005.

Performance Database: TRIM: Toxics Release Inventory Modernization, formerly TRIS (Toxics Release Inventory System) - contains aggregate data on source reduction by individual reporting facilities. The aggregate data are used to provide a measure of national performance.

Data Source: Regulated facilities report facility-specific, chemical-specific release reports and recycling data to EPA. For example, in calendar year 1999, 22,639 facilities filed 84,068 TRI reports.

QA/QC Procedures: Most facilities use EPA certified automated Toxics Release Inventory (TRI) FORM R reporting tools, which contains automated error checking mechanisms. Upon receipt of facility reports, EPA conducts automated edits, error checks, data scrubs, corrections and normalization during data entry and subsequent processing to verify that the information provided by the facilities is correctly entered in TRIM. The Agency does not control the quality of the data submitted by the regulated community. EPA does, however, work with the regulated community to improve the quality of their estimates.

Data Quality Review: The quality of the data contained in the TRI chemical reports is dependent upon the quality of the data that the reporting facility uses to estimate its releases and other waste management quantities. GAO Report, Environmental Protection: EPA Should Strengthen Its Efforts to Measure and Encourage Pollution Prevention (GAO - 01 - 283), recommends that EPA improve its rule on reporting of toxic releases to improve reporting on source reduction activities. Although EPA agrees that source reduction data is valuable, the Agency has not finalized regulations to improve reporting of source reduction activities by TRI-regulated facilities.

Data Limitations: Use of the data should be based on the user's understanding that the Agency does not have direct assurance of the accuracy of the facilities' measurement and reporting processes. TRI release data are reported by facilities on a good faith, best estimate basis. EPA does not have the resources to conduct on-site validation of each facility's reporting data, though on-site investigations do occur each year at a subset of reporting facilities.

New/Improved Data or Systems: EPA plans to develop regulations for improving reporting of source reduction activities by TRI reporting facilities.

Performance Measure: Millions of tons of municipal solid waste diverted; Daily per capita municipal solid waste generation.

Performance Database: Data is provided by the Department of Commerce. EPA does not maintain a database for this information.

Data Source: The baseline numbers for municipal solid waste source reduction and recycling are developed using a materials flow methodology employing data largely from the Department of Commerce and described in the EPA report titled “Characterization of Municipal Solid Waste in the United States.” The Department of Commerce collects solid waste generation and recycling rate data from various industries.

QA/QC Procedures: Quality assurance and quality control are provided by the Department of Commerce’s internal procedures and systems. The report prepared by the Agency is then reviewed by a number of experts for accuracy and soundness.

Data Quality Review: The report, including the baseline numbers and annual rates of recycling and per capita municipal solid waste generation, is widely accepted among experts. There are various assumptions factored into the analysis to develop progress on each measure.

Data Limitations: Non-hazardous waste data limitations stem from the fact that the baseline statistics and annual rates of recycling and per capita municipal solid waste generation are based on a series of models, assumptions, and extrapolations and, as such, are not an empirical accounting of municipal solid waste generated or recycled.

New/Improved Data or Systems: Because these numbers are widely reported and accepted by experts, no new efforts to improve the data or the methodology have been identified or are necessary.

Coordination with Other Agencies

This objective spans a broad range of pollution prevention activities, which can yield reductions in waste generation in both the public and private sectors. For example, the Environmentally Preferable Product initiative, which implements Executive Orders 12873 and 13101, is promoting the use of cleaner products by federal agencies, which may stimulate demand for the development of such products by industry.

This effort includes a number of demonstration projects with other federal departments/agencies, such as the General Services Administration (use of safer products for indoor painting and cleaning), Department of Defense (use of safer paving materials for parking lots), and Defense Logistics Agency (safer solvents). The program also works with the National

Institute of Standards and Technology, the International Standards Organization, and other groups to develop standards for Environmental Management Systems.

In addition to business, industry and other non-governmental organizations, EPA will work with Federal, State, Tribal, and local governments to encourage reduced generation of waste as well as the safe recycling of wastes. Frequently, successful projects require multiple partners to address the multi-media nature of effective source reduction and recycling programs. The Agency has brought together a range of stakeholders to examine alternatives in specific industrial sectors, and several regulatory changes have followed which encourage hazardous waste recycling. Partners in this effort include the Environmental Council of States, the Tribal Association on Solid Waste and Emergency Response, and the Association of State and Territorial Solid Waste Management Officials.

As Federal partners, EPA and the U.S. Postal Service (USPS) work together on several municipal solid waste projects. For instance, rather than dispose of returned or unwanted mail, EPA and the USPS developed and implemented successful recycling procedures and markets, including the return of unwanted mail (advertisements, catalogues, etc.) to the Post Office for recycling rather than disposal by the recipient. In addition, EPA Regional offices have provided significant assistance to the National Park Service to implement Integrated Solid Waste Management Plans at parks in western states. EPA also works with the Small Business Administration to provide support to recycling businesses.

EPA has worked with the Council on Environmental Quality (CEQ) and the Federal Environmental Executive (FEE) to reinvigorate Federal leadership for sustainable recycling. In particular, the Agency is currently engaged with the Department of Defense, Department of Education, USPS, Department of Energy, the FEE, and other agencies to foster proper management of surplus electronics equipment, with a preference for reuse and recycling. With these agencies, and in cooperation with the electronics industry, EPA participated in developing a draft interagency memorandum of understanding (MOU) which will lead to increased reuse and recycling of an array of computers and other electronics hardware used by civilian and military agencies. Implementation of this MOU will divert substantial quantities of plastic, glass, lead, mercury, silver, and other materials from disposal.

Statutory Authorities

Toxic Substances Control Act (TSCA) sections 4 and 6 and TSCA Titles II, III, and IV (15 U.S.C. 2605 and 2641-2692)

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) sections 3, 4, 5, 6, 11, 18, 24, and 25 (7 U.S.C. 136a, 136a-1, 136c, 136d, 136i, 136p, 136v, and 136w)

Pollution Prevention Act (PPA) (42 U.S.C. 13101-13109)

Clean Air Act (CAA) section 309 (42 U.S.C. 7609)

Clean Water Act (33 U.S.C. 1251-1387)

Emergency Planning and Community Right-to-Know Act (EPCRA) (42 U.S.C. 11001-11050)

Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6901-6992k) Solid Waste Disposal Act as amended by the Hazardous Waste Amendments of 1984

Environmental Protection Agency

FY 2003 Annual Performance Plan and Congressional Justification

Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

Objective: Assess Conditions in Indian Country

By 2005, EPA will assist all federally recognized tribes in assessing the condition of their environment, help in building tribes' capacity to implement environmental management programs, and ensure that EPA is implementing programs in Indian country where needed to address environmental issues

Resource Summary (Dollars in Thousands)

	FY 2001 Actuals	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Assess Conditions in Indian Country	\$66,653.2	\$65,436.6	\$70,909.4	\$5,472.8
Environmental Program & Management	\$11,372.3	\$12,966.9	\$13,439.7	\$472.8
State and Tribal Assistance Grants	\$55,280.9	\$52,469.7	\$57,469.7	\$5,000.0
Total Workyears	85.6	90.8	90.7	-0.1

Key Program (Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	\$47.4	\$0.0	\$0.0	\$0.0
American Indian Environmental Office	\$10,014.8	\$9,911.6	\$10,219.7	\$308.1
Facilities Infrastructure and Operations	\$0.0	\$1,165.4	\$1,250.3	\$84.9
Legal Services	\$1,370.1	\$1,383.0	\$1,428.7	\$45.7
Management Services and Stewardship	\$401.8	\$426.9	\$475.5	\$48.6
Regional Management	\$53.9	\$80.0	\$65.5	(\$14.5)
Tribal General Assistance Grants	\$52,469.7	\$52,469.7	\$57,469.7	\$5,000.0

FY 2003 Request

Under Federal environmental statutes, the Agency has responsibility for assuring human health and environmental protection in Indian country. Since 1984, EPA policy has been to work with Tribes on a government-to-government basis that affirms the vital trust responsibility that EPA has with every federally-recognized Tribal government. EPA endeavors to address Tribal environmental priorities, ensure compliance with environmental laws, provide field

assistance, assure effective communication with Tribes, allow flexibility in grant programs, and provide resources for Tribal operations.

A lack of comprehensive environmental data severely impacts our ability to properly identify risk to human health and the environment in Indian country. Progress toward building Tribal and EPA infrastructure and completing a documented baseline assessment of environmental conditions continues to be a major focus for the Agency and Tribes. These baseline assessments will provide a blueprint for planning future activities through the development of Tribal/EPA Environmental Agreements (TEAs) or similar Tribal environmental plans to address and support priority environmental multi-media concerns in Indian country.

Under the authority of the Indian Environmental General Assistance Program (GAP) Act of 1992, EPA provides grants to Tribal governments and intertribal consortia for developing the capacity to administer multi-media environmental protection programs. In 2003, EPA is requesting \$57.5 million toward the Indian General Assistance Program goal of establishing a minimal environmental presence for all Federally recognized Tribes and intertribal consortia. These resources will allow most Tribes to support at least one of two persons working in their community to build a strong, sustainable environment for the future. Approximately 400 or 70% of the federally recognized tribes are funded with GAP funds; these additional funds will allow approximately 45 additional Tribes to establish an environmental presence. The vital work performed by these key people is to: assess the status of a Tribe's environmental condition, build an environmental program tailored to the Tribe's needs, develop environmental education programs and solid waste management plans, assist in the building of Tribal environmental capacity, and alert EPA to serious conditions involving immediate public health and ecological threats.

The EPA has strived to work effectively with Indian Tribes since before the promulgation of its formal Indian Policy in 1984. Vital to that policy are the principles that the Agency has a government-to-government relationship with Tribes and that "EPA recognizes Tribes as the primary parties for setting standards, making environmental policy decisions and managing programs for reservations, consistent with agency standards and regulations." To that end, EPA "encourage[s] and assist[s] Tribes in assuming regulatory and program management responsibilities," primarily through its Treatment in the Same Manner as a State (TAS) process under several environmental statutes.

EPA's policy has been and will continue to be that Tribes develop the capability to implement federal programs themselves. However, in working with Tribes, EPA has realized that TAS does not suit the needs of all Tribes. Some Tribes with acute pollution sources and other environmental problems may be too small to support a fully delegated or approved environmental programs. Other Tribes are wary of seeking TAS status because it may lead to costly litigation that may in turn lead to a diminishment of Tribal sovereignty. As a result few Tribes have sought TAS under EPA's various regulatory programs. In the absence of EPA-approved Tribal programs, EPA generally faces practical challenges in implementing the federal programs in Indian country. EPA will continue to encourage and work with Tribes to develop their capability to implement Federal environmental programs.

In accordance with EPA's longstanding policy, EPA is considering additional approaches for how EPA and Indian Tribes might work together to protect public health and the environment in Indian country. As part of that effort, EPA is again proposing language for inclusion in the President's budget that would allow EPA to award cooperative agreements to federally recognized Indian Tribes or qualified Intertribal consortia to assist the Administrator in implementing federal environmental programs for Indian Tribes. These cooperative agreements would be made notwithstanding the Federal Grant and Cooperative Agreement Act requirements that federal agencies use a contract when the principal purpose of a transaction is to acquire services for the direct benefit or use of the United States. Cooperative agreements, rather than a contract under the federal acquisition regulation, are the preferred funding mechanism, since they better reflect the government-to-government relationship. These cooperative agreements would not be awarded using funds designated for State financial assistance agreements.

The proposed language would promote Tribal participation when EPA is directly implementing federal environmental programs in Indian country or for Tribes. It would also help Tribes build the capacity to achieve TAS status if they wish to do so. While EPA would retain final decision-making authority and ultimate responsibility for all regulatory activities where EPA directly implements federal programs, the proposed language would allow for varying degrees of Tribal involvement in assisting EPA in carrying out the federal program depending upon a Tribe's interest and ability in carrying out specific work. Some Tribes might perform much of the work for EPA necessary to develop and carry out federal environmental programs. Other Tribes might gradually increase their involvement as their capacity to assist EPA increases over time. In this way, the proposed language would improve environmental protection while also building the capacity and expertise of the Tribes to run their own environmental programs. In the near future EPA plans to explore ways to provide Tribes with incentives to develop their capacity to implement Federal environmental programs.

FY 2003 Change from FY 2002

STAG

- (+\$5,000,000) This increase in Indian General Assistance Program grants supports the Indian General Assistance Program goal of establishing a minimum environmental presence for all Federally recognized Tribes and inter-tribal consortia which will help to improve the targeting of other EPA assistance.

Annual Performance Goals and Measures

Tribal Environmental Baseline/Environmental Priorities

In 2003 In 2003, AIEO will evaluate non-Federal sources of environmental data pertaining to conditions in Indian Country to enrich the Tribal Baseline Assessment Project.

In 2002 Baseline environmental information will be collected for 38% of Tribes (covering 50% of Indian Country).

In 2001 Baseline environmental assessments were collected for 207 Tribes.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request
Environmental assessments for Tribes. (cumulative)	207	286	Tribes, etc.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	20	Data sources
Non-federal sources of environmental data pertaining to conditions in Indian Country.					

Baseline: There are 572 tribal entities that are eligible for GAP program funding. These entities are the ones for which environmental assessments of their lands will be conducted.

Verification and Validation of Performance Measures

Performance Measure: Non-federal sources of environment data pertaining to conditions in Indian Country

Performance Database: The American Indian Environmental Office (AIEO) Tribal Information Management System (TIMS) is used to access Baseline Assessment Project environmental information on federally recognized Indian Tribes. TIMS draws together environmental information on Tribes from existing EPA databases, such as those from media program offices, EPA Regions, as well as databases from other federal agencies. The data is accessible and can be queried by Tribe, by state, by EPA Region, or nationally. Information can be displayed in several manners including graphically on an electronic map of tribal reservation boundaries. TIMS also contains a narrative profile description by Tribe of environmental information and management activities.

Data Source. Current TIMS' data sources are existing federal databases, both from EPA and other agencies, supplemented by data sources collected from the EPA regions as appropriate. All data sources are identified and referenced in the TIMS application. In FY 2003, AIEO will analyze data from 20 non-federal data sources for enrichment the Tribal Baseline Assessment Project. Those data sources found to have an enrichment benefit by supplementing, complementing, or adding value to the federal data sources will be integrated into TIMS.

QA/QC Procedures. Quality of the external databases will be described but not ranked. A Quality Management Plan is projected for development as agency-wide guidance is developed.

Data Quality Reviews. Tribes will have the opportunity to review and comment upon their Tribal Profile. Mechanisms for adjusting data will be supplied.

Data Limitations. Data limitations appearing in the Tribal profiles is subject to the underlying existing database systems referenced.

Coordination with Other Agencies

Solid Waste Interagency Workgroup

EPA and a large number of Agencies including the Bureau of Indian Affairs, the Indian Health Service, the Federal Aviation Administration, the National Oceanic and Atmospheric Administration, and the Departments of Housing and Urban Development, Agriculture (Forest

Service and Rural Utilities Service), and Defense are working collaboratively to identify, prioritize and close solid waste dumps in Indian country. The Group is focusing on 146 of the highest priority sites from the Indian Health Service's 1997 Report to Congress, entitled "Open Dumps on Indian Lands," which contains an inventory of 1,162 open dumps in Indian country. Additional agencies are likely to participate as the workgroup further defines its goals and strategy.

Other Examples of Interagency Coordination

EPA and the Department of Interior are coordinating an Interagency Tribal Information Steering Committee which includes the Bureau of Reclamation, Department of Energy, Department of Housing and Urban Development, U.S. Geological Survey, Federal Geographic Data Committee, Bureau of Indian Affairs, Indian Health Service, Department of the Treasury, and Department of Justice. This Interagency effort is aimed to coordinate the exchange of selected sets of environmental, resource, and programmatic information pertaining to Indian country among federal agencies in a "dynamic" information management system that is continuously and automatically updated and refreshed, to be shared equally among partners and other constituents.

Under a two- party Interagency agreement, EPA works extensively with the Indian Health Service to cooperatively address the drinking water and wastewater infrastructure needs of Indian Tribes.

Statutory Authorities

Indian Environmental General Assistance Program (GAP) Act of 1992 as amended (42 U.S.C. 4368b)