5-YEAR PERFORMANCE DATA
Annual Performance Goals and Measures

GOAL 01: CLEAN AIR

The air in every American community will be safe and healthy to breathe. In particular, children, the elderly, and people with respiratory ailments will be protected from health risks of breathing polluted air. Reducing air pollution will also protect the environment, resulting in many benefits, such as restoring life in damaged ecosystems and reducing health risks to those whose subsistence depends directly on those ecosystems.

OBJECTIVE 01: ATTAIN NAAQS

Reduce the risk to human health and the environment by protecting and improving air quality so that air throughout the country meets national clean air standards by 2005 for carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead; by 2012 for ozone; and by 2018 for particulate matter (PM). To accomplish this in Indian country, the tribes and EPA will, by 2005, have developed the infrastructure and skills to assess, understand, and control air quality and protect Native Americans and others from unacceptable risks to their health, environment, and cultural uses of natural resources.

Reduce Ozone and Ozone Precursors

In 2003	Maintain healthy air quality for 44.1 million people living in monitored areas attaining the ozone standard; certify that 2 areas of the remaining 45 nonattainment areas have attained the 1-hour NAAQS for ozone thus increasing the number of people living in areas with healthy air by 1.0 million.
In 2001	EPA maintained healthy air quality for 38.2 million people living in 43 areas attaining the ozone standard, increased by 3.5 million the number of people living in areas with healthy air quality that have newly attained the standard by certifying that 3 new areas have attained the 1-hour standard.
In 2000	Maintained healthy air quality for 33.4 million people living in 43 areas attaining the ozone standard.
In 1999	Healthy air quality maintained for 33.4 million people living in 43 areas attaining the ozone standard.
In 1999	The Regions revoked the 1-hour standard in 10 areas. However, based upon the Circuit Court decision regarding the revised ozone standard, the Agency has proposed to reinstate the 1-hour standard.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Publish Notice Revoking 1-Hour Standard	10					Areas
Consumer Product Rules	0					Rules
National Guidance on Ozone SIP	1 Draft					Issued
States submit designations of areas for attainment of the ozone standard	50					States
Total Number of People who Live in Areas Designated to Attainment of the Clean Air Standards for Ozone	33,363,000	35,063,000	41,679,000		45,167,000	People
Areas Designated to Attainment for the Ozone Standard	0	1	3		2	Areas
Additional People Living in Newly Designated Areas with Demonstrated Attainment of the Ozone Standard	0	1,700,000	3,475,000		1,021,000	People
VOCs Reduced from Mobile Sources	1,409,000	1,562,000	1,659,000		1,852,000	Tons
NOx Reduced from Mobile Sources	898,000	1,059,000	1,189,000		1,449,000	Tons

Baseline: As a result of the Clean Air Act Amendments of 1990, 101 areas with a population of 140,015,000 were designated nonattainment for the 1-hour standard. Through 2001, 46 areas with a population of 41.7 million have been redesignated to attainment and 55 areas remain in nonattainment. (Population estimates based on 2000 census.) The 1995 baseline for VOCs reduced from mobile sources is 8,134,000 tons and 11,998,000 tons for NOx, both ozone precursors.

Reduce Particulate Matter

In 2003 Maintain healthy air quality for 7.2 million people living in monitored areas attaining the PM standards; increase by 81 thousand the number of people living in areas with healthy air quality that have newly attained the standard.

In 2001 EPA maintained healthy air quality for 1.189 million people living in 9 areas attaining the PM standards and increased by 2.249 million the number of people living in areas with healthy air quality that have newly attained the standard.

In 2000 Maintained healthy air quality for 1.2 million people living in 7 areas attaining the PM standards, and increased by 75.8 thousand the number of people living in areas with healthy air quality that have attained the standard.

In 1999 EPA deployed PM-2.5 ambient monitors including: mass, continuous, speciation, and visibility sites resulting in a total of 1110 monitoring sites.

In 1999 Healthy air quality maintained for 1.2 million people living in 7 areas attaining the PM standards.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
National Guidance on PM-2.5 SIP and Attainment Demonstration Requirements	1 Draft					Issued
Provide Draft Documents to CASAC for PM NAAQS Review	30-Sep-2000					
Cumulative total number of monitoring sites deployed	1110					Sites
Total Number of People who Live in Areas Designated in Attainment with Clean Air Standards for PM	1,200,000	1,275,800	3,438,000		7,262,000	People
Areas Designated to Attainment for the PM-10 Standard	0	2	8		8	Areas
Additional People Living in Newly Designated Areas with Demonstrated Attainment of the PM Standard	0	75,800	2,249,000		81,000	People
PM-10 Reduced from Mobile Sources	18,000	20,000	22,000		25,000	Tons
PM-2.5 Reduced from Mobile Sources	13,500	15,000	16,500		18,000	Tons

Baseline: As a result of the Clean Air Act Amendments of 1990, 84 areas with a population of 31,114,000 were designated non-attainment for the PM-10 standard. Since that time, EPA has split Pocatella into 2 areas thereby revising the baseline to 85 with a population of 31,114,000. Through 2001, 17 areas with a population of 3.4 million have been redesignated to attainment. (Population estimates based on 2000 Census.) The 1995 baseline for PM-10 reduced from mobile sources is 880,000 tons and 659,000 for PM-2.5.

Reduce CO, SO2, NO2, Lead

In 2003 Maintain healthy air quality for 52.7 million people living in monitored areas attaining the CO, SO2, NO2, and Lead standards; increase by 4.1 million the number of people living in areas with healthy air quality that have newly attained the standard.

In 2001 EPA maintained healthy air quality for 36.3 million people living in 56 areas attaining the CO, SO2, NO2, and Lead standards and increased by 418,000 the number of people living in areas with healthy air quality that have newly attained the standard.

In 2000 Maintained healthy air quality for 27.7 million people living in 46 areas attaining the CO, SO2, NO2, and Lead standards, and increased by 3.41 million the number of people living in areas with healthy air quality that have attained the standard.

In 1999 13 of the 58 estimated remaining nonattainment areas have achieved the NAAQS for carbon monoxide, sulfur dioxide, or lead.

In 1999 Healthy air quality for 22.8 million people living in 33 areas attaining the CO, SO2, NO2, and Lead standards was maintained, and 4.9 million more people are living in areas with healthy air quality that have attained the standard.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Total Number of People Living in Areas Designated in Attainment with Clean Air Standards for CO, SO2, NO2, and Pb	27,718,000	31,100,000	36,721,000		56,732,000	People
Areas Designated to Attainment for the CO, SO2, NO2, and Pb Standards	13	10	9		15	Areas
Additional People Living in Newly Designated Areas with Demonstrated Attainment of the CO, SO2, NO2, and Pb Standards	4,918,531	3,410,000	418,000		4,007,300	People
CO Reduced from Mobile Sources	9,841,000	10,341,000	10,672,000		11,333,000	Tons
Total Number of People Living in Areas with Demonstrated Attainment of the NO2 Standard	13,000,000	13,000,000	14,944,000		14,944,000	People

Baseline: For SO2, NO2, Lead, and CO, 107 areas with a population of 67,573,000 were classified as non-attainment or were unclassified in 1990. Through 2001, 65 of those areas with a population of 36.7 million have been redesignated to attainment. (Population estimates based on 2000 census.) The 1995 baseline for mobile source emissions for CO was 70,947,000 tons.

Air Quality Index

In 2003 The three year average of the total number of days nationwide that any city reports air quality index (AQI) values greater than 100 in the nation's 94 largest metropolitan areas will drop from 1,548 in 1997-1999 to 1,290 in 2001-2003, which is 3.7% of total days.

In 2001 Three year trend data not available until late 2002.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of Area Days Greater than 100			Data Lag		1,290	Area Days

Baseline: The AQI provides information on pollutant concentrations for ground level ozone (O3), particulate matter (PM-10), carbon monoxide (CO), sulfur dioxide (SO2), and nitrogen dioxide (NO2). Of these 5 pollutants, only 4 (CO, O3, PM-10, and SO2) generally contribute to the AQI value. Ozone contributes 98% of the AQI days over 100 due to ozone in 1999. The proposed measure is a three year running average of the total metropolitan statistical area days (msa-days) above an AQI value of 100. This averaging helps to account for the variability (upward and downward swings) associated with the significant effect of meteorology on this metric. Since 1993, the running 3 year average of AQI msa-days > 100 has fluctuated with a high of 1,586 for 1993-1995, a low of 1,414 for 1997-1999 and the mean of the average number of msa-days from the three year periods 1991-1993 through 1998-2000 at 1,490. This is a new measure for 2003, EPA will use the mean for the previous 7 three year periods (1,490) as its estimate for 2001 and targeted a reduction of 100 total msa-days each year through 2003.

Research

PM Effects Research

In 2003	Describe health effects of PM and its components in normal and susceptible populations, mechanisms by which PM exerts adverse health effects, and analyze ambient and personal exposure to PM so that EPA has the necessary information to develop NAAQS that protect human health.
In 2001	EPA provided new information on the atmospheric concentrations, human exposure, health effects and mechanisms of toxicity of particulate matter.
In 2000	EPA provided new information on the atmospheric concentrations, human exposure, and health effects of particulate matter (PM), including PM2.5, and incorporated it and other peer-reviewed research findings in the second External Review Draft of the PM AQCD for NAAQS review.
In 1999	Completed three reports on PM: (1) describing research designed to test a hypothesis about mechanisms of PM-induced toxicity; (2) characterizing factors affecting PM dosimetry in humans; and (3) identifying PM characteristics (e.g. composition) associated with biological responses.
In 1999	Three projects completed: 1) pilot study of methods to assess PM effects on changes in cardiovascular and inflammatory endpoints; 2) long-term exposures to PM and effects on mortality and lung function; and 3) Interagency agreement with NIAID to support EPAs part of Inner City Asthma study.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Reports (1) describing research designed to test a hypothesis about mechanisms of PM-induced toxicity; 2) charct. factors affecting PM dosimetry in humans; 3) ID PM characteristcs (composition)	3 Reports					
Hold CASAC review of draft PM Air Quality Criteria Document.		1				review
Complete longitudinal panel study data collection & preliminary report on exposure of susceptible subpopulations to total PM & co-occurring gases of ambient origin and i.d. key exposure parameters...		1				report
Data generated from PM monitoring studies in Phoenix, Fresno, and Baltimore will be used to reduce uncertainties on atmospheric PM concentrations in support of Draft PM Air Quality Criteria Document.		30-Sep-2000				data
Reports on (1) role of host susceptibility factors, such as compromised cardiopulmonary systems, on responses to PM exposures and (2) data on regional deposited dose of inhaled ultrafine particles.		30-Sep-2000				reports

Report on results from Baltimore study evaluating the cardio- vascular and immunological responses of elderly individuals to PM.		1			report
Delivery of computer model to assess the effect of spatial variability on human exposure as manifested by health.	1 model				
Reports on (1) long-term exposures to PM and effects on mortality and lung function.	1 manuscript				
Complete PM longitudinal panel study data collection and report exposure data.			1		study
Report on health effects of concentrated ambient PM in healthy animals and humans, in asthmatic and elderly humans, and in animal models of asthma and respiratory infection.			1		report
Final PM Air Quality Criteria Document completed.			0		final AQCD
Publish report on the empirical and theoretical lung deposition dose of ultrafine, fine, and coarse particles in elderly and mild asthmatic subjects under various breathing conditions.				1	report
Describe the relative importance of PM attributes (physical, chemical, and biological) on health outcomes in laboratory animals and humans.				1	evaluation
Ascertain attributes of susceptibility contributing to the responsiveness of cardiovascular- and pulmonary-compromised humans and laboratory animals.				1	analysis
Describe biochemical and neurogenic mechanisms by which PM modulates cardiovascular, hematological, and pulmonary functions.				1	evaluation
Report on the acute respiratory health effects of particulate matter and co-pollutants among asthmatic children in seven U.S. communities.				1	report

Baseline: At present, there is substantial evidence from epidemiological studies that increased levels of particulate matter (PM) are associated with increased frequency of death and disease, especially in the elderly, in individuals with cardiopulmonary disease, and in children. We still do not understand which PM components are responsible for increased mortality and morbidity, nor do we fully understand whether personal exposure to PM is reflective of exposure information obtained from fixed site monitoring. Our understanding of the biological mechanisms underlying these associations, and a fuller

understanding of populations which may be susceptible to PM are also only now beginning to emerge. As noted by the National Research Council, the EPA research program is well targeted to address these critical knowledge gaps and is well integrated with the extensive ambient air monitoring programs managed by state and local agencies. The results of the research efforts in 2003 will include development and application of new methods for assessing human exposure, identifying susceptible populations and major PM components responsible for toxicity, and characterizing mechanisms of toxicity leading to PM health effects, all of which will yield an improved scientific basis for setting National Ambient Air Quality Standards (NAAQS) for PM.

PM Measurement Research

In 2003	Provide updated data on PM source emissions, technology costs and performance, and air quality models so that States will have improved PM emissions inventories and compliance strategies for attaining the PM NAAQS and safeguarding public health.
In 2001	Provided new information on particulate matter source emissions, measurements, methods, and emissions-based air quality models to guide State Implementation Plan (SIP) development under the PM NAAQS.
In 2000	EPA developed particulate matter (PM) measurements, methods, emissions-based air quality models, and source emissions and control information to guide State Implementation Plan (SIP) development under the current PM NAAQS by completing the products below and other research activities.
In 1999	Awarded five (5) grants in June 1999 to establish Particulate Matter (PM) research centers for a period of five years, which will advance scientific understanding of the health effects of PM in the areas of exposure, dosimetry and modeling, toxicology, and epidemiology.
In 1999	Completed four reports on the following topics: 1) wood stove PM emissions (draft); 2) fine PM and organic speciation of fireplae emissions (draft); 3) fine PM characterization of heavy duty diesel vehicle exhause plumes (draft); and 4) characterizing PM emissions from mobile construction equipment.
In 1999	Release of Models-3/CMAQ-Version 2 for PM was completed.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Produce data on the size distribution of particles emitted from residential wood combustion (fireplac	2 Reports					
Produce improved receptor models (CMB8 and UNMIX) for measurement of source category emissions impacts on air quality.		2				models
Complete a preliminary evaluation of Models-3/Community Multi-Scale Air Quality (CMAQ) for PM, demonstrating its potential reliability for PM NAAQS attainment planning		30-Sep-2000				evaluation
In 1999 establish five airborne particulate matter (PM) research centers to conduct integrated studies on PM exposure, dosimetry and extrapolation modeling, toxicology and epidemiology.	5 Grant Awards					

Publish a report on the size distribution of particles emitted from diesel trucks under various on-road conditions to improve source inventories for NAAQS implementation.	1		report
Publish peer reviewed documentation of the PM components of Models-3/CMAQ.	1		documentation
Prepare a report evaluating a new PM control technology, electrostatic fabric filtration, for use on coal-fired boilers.		1	report
To support the OAR PM regulatory program, produce a paper on emissions of ammonia from hog waste lagoons, both before and after application of mitigation techniques.		1	paper
Complete analysis of organic compounds in PM samples from combustion sources. Data will be used to update an OAR database used by states to determine sources of ambient PM.		1	compendium

Baseline: There are existing databases, measurement methods, models, and other tools used to support decisions concerning implementation of the NAAQS for PM. Recent scientific advances and proposed changes to the PM standard require additional research to update and validate the existing tools and to develop new tools. While much is known about the emissions and concentrations of sulfur oxides and nitrogen oxides that contribute to formation of PM in the ambient air, less is known about other variables such as emissions of ammonia and directly emitted PM, how to measure the organic and elemental fractions of PM, and the myriad atmospheric reactions that lead to PM formation. Improvements are needed to measure various PM components at high time resolution and better specificity and to determine the physical properties of PM including size fractions and composition in ambient monitoring networks. Improvements are also needed to better understand the effect of meteorological parameters and other factors that may bias the measurements. Studies to validate and upgrade emission based and receptor models are also needed to ensure these tools produce the best results possible to support NAAQS compliance decisions. Key needs include studies to validate PM concentrations generated by the model against actual field measurements, improved data on the composition of directly emitted PM to identify unique tracers that relate emissions from a specific source, and improvements in our understanding of PM formation in clouds and fogs and transport processes at the surface and aloft to upgrade model algorithms that calculate atmospheric PM formation. Finally, as new PM and multi-pollutant control technologies are developed, technical and economic assessments are needed to assess their viability. Federal, state, and local air quality officials will use the upgraded models, methods and other tools to design and implement existing and new PM and visibility standards.

OBJECTIVE 02: REDUCE AIR TOXICS RISK

By 2020, eliminate unacceptable risks of cancer and other significant health problems from air toxic emissions for at least 95 percent of the population, with particular attention to children and other sensitive subpopulations, and substantially reduce or eliminate adverse effects on our natural environment. By 2010, the tribes and EPA will have the information and tools to characterize and assess trends in air toxics in Indian country.

Reduce Air Toxic Emissions

In 2003 Air toxics emissions nationwide from stationary and mobile sources combined will be reduced by an additional 3% of the updated 1993 baseline of 6.1 million tons (for a cumulative reduction of 40% from the 1993 level of 6.1 million tons per year.)

In 2001 End-of-year FY 2001 data will be available in late 2004 to verify that air toxics emissions nationwide from stationary and mobile sources combined will be reduced by 5% from 2000 (for a cumulative reduction of 35% from the 1993 level of 4.3 million tons.)

In 2000 End-of-year FY 2000 data will be available in late 2004 to verify that air toxics emissions nationwide from stationary and mobile sources combined will be reduced by 3% from 1999 (for a cumulative reduction of 30% from the 1993 level of 4.3 million tons.)

In 1999 Air toxics emissions nationwide from stationary and mobile sources combined were reduced by 12% from 1998 (for a cumulative reduction of 27% from the 1993 level of 4.3 million tons.)

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Combined Stationary and Mobile Source Reductions in Air Toxics Emissions	12		5		3	Percent
Federal Register Publication of Final MACT Standards			4		19	Notices
Number of proposed MACT standards.			13		9	Proposed

Baseline: In 1993, the last year before the MACT standards and mobile source regulations developed under the Clean Air Act were implemented, stationary and mobile sources are now estimated to have emitted 6.1 million tons of air toxics. (EPA's prior estimate was 4.3 million tons.) Air toxics emission data are revised every three years to generate inventories for the National Toxics Inventory. Reductions are estimated from regulatory controls in the years between the three year updates. Using revised inventories and improved models, the estimate has been revised up from the previous estimate of 4.3 million tons.

OBJECTIVE 03: REDUCE ACID RAIN

By 2005, reduce ambient nitrates and total nitrogen deposition to 1990 levels. By 2010, reduce ambient sulfates and total sulfur deposition by up to 30 percent from 1990 levels.

Reduce SO2 Emissions

In 2003 Maintain or increase annual SO2 emission reduction of approximately 5 million tons from the 1980 baseline. Keep annual emissions below level authorized by allowance holdings and make progress towards achievement of Year 2010 SO2 emissions cap for utilities.

In 2001 End-of-year FY 2001 data will be available in late 2002 to verify that 2 million tons of NOx from coal-fired utility sources were reduced from levels that would have been emitted without implementation of Title IV of the Clean Air Act Amendments.

In 2000 6.3 million tons of SO2 emissions from utility sources were reduced from 1980 baseline.

In 1999 On-track to achieve APG. End-of-year FY 1999 data will not be available until late 2000.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
SO2 Emissions		6,300,000	On track		5,000,000	Tons Reduced
NOx Reductions	30-Oct-2000					Tons Reduced

Baseline: The base of comparison for assessing progress on the annual performance goal is the 1980 emissions baseline. The 1980 SO2 emissions inventory totals 17.5 million tons for electric utility sources. This inventory was developed by National Acid Precipitation Assessment Program (NAPAP) and used as the basis for reductions in Title IV of the Clean Air Act Amendments. This data is also contained in EPA's National Air Pollutant Emissions Trends Report. Statutory SO2 emissions cap for year 2010 and later is at 8.95 million tons which is approximately 8.5 million tons below 1980 emissions level. "Allowable SO2 emission level" consists of allowance allocations granted to sources each year under several provisions of the Act and additional allowances carried over, or banked, from previous years.

Reduce NOx Emissions

In 2003 2 million tons of NOx from coal-fired utility sources will be reduced from levels that would have been emitted without implementation of Title IV of the Clean Air Act Amendments.

In 2001 End-of-year FY 2001 data will be available in late 2002 to verify that NOx emissions during ozone season from participating utility and industrial sources were below allowable level authorized by allowance (approximately 50% reduction from 1990 baseline).

In 2000 2 million tons of NOx from coal-fired utility sources were reduced from levels before implementation of Title IV of the Clean Air Act Amendments.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
NOx Reductions		2,000,000	On track		2,000,000	Tons Reduced

Baseline: Performance Baseline: The base of comparison for assessing progress on this annual performance goal is emissions that would have occurred in the absence of Title IV of the Clean Air Act Amendments. These emissions levels are calculated using actual annual heat input and the baseline (uncontrolled) NOx emission rates by boiler type from the preamble to the final rule (61 FR 67112, December 19, 1996).

Reduce Ozone Season NOx Emissions

In 2003 Control NOx emissions during ozone season from participating utility and industrial sources to below allowable level authorized by allowances.

In 2001 End-of-year FY 2001 data will be available in late 2002 to verify that NOx emissions during ozone season from participating utility and industrial sources were below allowable level authorized by allowance (approximately 50% reduction from 1990 baseline).

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Ozone Season NOx Reductions			Data Lag		220,000	Tons Reduced

Baseline: Performance Baseline: The base of comparison for assessing performance on annual performance goals is the 1990 emissions baselines adopted in the state rules. The ozone season is 5 months long, May 1 to September 30. "Allowable NOx emissions level" is defined by the sum of allowance allocations authorized by various provisions in enabling state rules and allowances carried over, or banked, from previous years discounted by the Progressive Flow Control ratio. An allowance authorizes a source to emit one ton of NOx during the ozone season.

GOAL 02: CLEAN AND SAFE WATER

All Americans will have drinking water that is clean and safe to drink. Effective protection of America's rivers, lakes, wetlands, aquifers, and coastal and ocean waters will sustain fish, plants, and wildlife, as well as recreational, subsistence, and economic activities. Watersheds and their aquatic ecosystems will be restored and protected to improve human health, enhance water quality, reduce flooding, and provide habitat for wildlife.

OBJECTIVE 01: ENSURE SAFE DRINKING WATER, FISH AND RECREATIONAL WATERS

By 2005, protect public health so that 95% of the population served by community water systems will receive water that meets drinking water standards, consumption of contaminated fish and shellfish will be reduced, and exposure to microbial and other forms of contamination in waters used for recreation will be reduced.

Safe Drinking Water

In 2003	85 percent of the population served by community water systems will receive drinking water meeting health-based standards promulgated in or after 1998.
In 2003	92% of the population served by community water systems will receive drinking water meeting all health-based standards in effect as of 1994, up from 83% in 1994.
In 2003	93 percent of the population served by non-community, non-transient drinking water systems will receive drinking water for which no violations of Federally enforceable health standards have occurred during the year, up from 88% in 1994.
In 2001	91 percent of the population served by water systems received drinking water meeting all health-based standards that were in effect as of 1994.
In 2000	91% of the population served by community drinking water systems received drinking water meeting all health-based standards that were in effect as of 1994, up from 83% in 1994.
In 2000	93% percent of the population served by non-community, non-transient drinking water systems which received drinking water for which no violations of any federally-enforceable health-based standards occurred during the year.
In 1999	91% of the population served by community water systems received drinking water meeting all health-based standards in effect as of 1994, up from 83% in 1994.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Population served by non-community, non-transient drinking water systems with no violations during the year of any Federally enforceable health-based standards that were in place by 1994.		93	92		93	% population

Percent of population served by community drinking water systems with no violations during the year of any Federally enforceable health-based standards that were in place by 1994.	91	91		92	% Population
Population served by community water systems providing drinking water meeting health-based standards promulgated in or after 1998.				85	% Population

Baseline: In 1998, 85% of the population that was served by community water systems and 96% of the population served by non-community, non-transient drinking water systems received drinking water for which no violations of Federally enforceable health standards had occurred during the year.

Drinking Water Systems Operations

In 2003	Enhance homeland security by securing the nation's critical drinking water infrastructure.
In 2003	Enhance protection of tribal health by increasing the percentage of tribal community and non-community water systems that are run by certified operators.
In 2003	Protect human health and ensure compliance with health-based drinking water standards through use of the Drinking Water State Revolving Fund (DWSRF).
In 2001	69% of tribal community and non-transient non-community water systems have a certified operator.
In 2001	Protected human health and ensured compliance with health-based drinking water standards by initiating 822 DWSRF operations and having 1,876 assistance agreements to community and non-community drinking water systems.
In 2000	528 eligible drinking water systems initiated operations that protect human health and ensure compliance with health-based drinking water standards through use of the Drinking Water State Revolving Fund (DWSRF).
In 1999	792 community drinking water systems received DWSRF funds that helped ensure that these systems provide drinking water that meets all health-based standards.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
DWSRF assistance agreements to community and non-community drinking water systems. (cumulative)		1411	1876		3,000	Agreements
Tribal community and non-transient non-community water systems with a certified operator.			69%		73%	Water systems

Percent of the population served by, and the number of medium-sized (10,001 - 100,000 served) community water systems that have completed or are conducting vulnerability assessments.					100%/3,416	% pop/systems
Percent of the population served by, and the number of, small (fewer than 10,000 served) community water systems that have completed or are conducting vulnerability assessments.					50%/25,100	% pop/systems
CWSs receiving DW SRF funds to help ensure that they provide drinking water that meets all health-based standards	792					CWSs
DWSRF projects that have initiated operations. (cumulative)		528	822		1,600	Projects

Baseline: In FY99, there were 792 DWSRF assistance agreements to community and non-community drinking water systems. DWSRF projects will begin to initiate operations in 2000. As of 1999, 56% of tribal community and non-transient non-community water systems had certified operators.

Rules for High-Risk Contaminants

In 2003	Ensure public health protection by identifying and studying potentially harmful contaminants in drinking water and developing, issuing, and revising regulations and/or guidance to limit exposure to contaminants found to be harmful to people.
In 2001	Expanded public health protection through the promulgation of arsenic, radionuclides, filter backwash, and made 9 determinations whether or not to regulate potentially harmful contaminants from the CCL.
In 2000	Radon & arsenic regulations were promulgated/proposed respectively, & 5 rules were implemented to ensure protection from high-risk contaminants.
In 1999	EPA developed major risk analyses for microbial and chemical contaminants to support selection of contaminants to be regulated.
In 1999	EPA issued and began implementing two protective drinking water standards for high- risk contaminants, including disease-causing micro-organisms (Stage I Disinfection/Disinfection Byproducts and Interim Enhanced Surface Water Treatment Rules).
In 1999	EPA promulgated the monitoring of unregulated contaminants rule ensuring that the highest risk contaminants are identified and managed.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of health risk assessments started/completed for contaminants that are potentially harmful to people.			9			Assessments

Regulatory determinations for potentially harmful contaminants.			5			Determinations
Number of regulations and associated technical guidance documents proposed/promulgated.					2/1	Regs/guidances
States, including DC and PR, that have received training and technical assistance on 4 of the rules that are being implemented.		52				States, DC, PR
States submitting primacy revisions and number with signed extension agreements for primacy.		33/30				States
Risk analyses for microbial/chemical contaminants	1					List
Regulations promulgated that establish protective levels for high-risk contaminants	2					Rules
Availability of monitoring of unregulated contaminants rule.	1					Regulation
Regulations promulgated/proposed.		2	3			Regulations

Baseline: By the end of 2000 an estimated 5 rules will have been promulgated.

Underground Injection Well Management

In 2003 Target implementation of UIC regulations to ensure low risk of contamination to source water resources.

In 2001 Through the UIC program, EPA contributed to the protection of ground water sources of drinking water from potential endangerment by bringing 11,266 Class IV/V wells under specific controls through permits or closure.

In 2000 Increased protection of ground water resources by bringing 500 Class IV/V wells under specific controls through permits or closures and by plugging 3,852 underground injection wells.

In 1999 Data for underground injection wells tested and passed for mechanical integrity is expected to be available in March 2000.

In 1999 The draft regulation for UIC Class V wells that will protect groundwater sources of drinking water from potential endangerment was completed and made available for public comment in fiscal year 1999. The final rule was published in the Federal Register on December 7, 1999.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
States that have formally adopted the Class V rule.			8			States

Class IV/V wells (by well type) brought under specific controls through permits or closures.		500	11,266		Wells
Issue proposed Phase 2 UIC Class V regulatory action.			1		Action
Number of motor vehicle disposal wells closed and/or permitted. (Class V)				400	Wells
Percentage of underground injection wells out of compliance with a permit and/or rule authorized that are returned to compliance in an appropriate and timely manner. (Classes I, II, and III only)				90	% wells
Availability of UIC Class V Regulation	0				Final Reg
Underground Injection wells tested and passed for mechanical integrity	TBD				% Wells
States, including DC and PR, that have received training and technical assistance on the Class V Rule.		50			States, DC, PR
UIC wells plugged as a direct action by the UIC program or indirectly by another program working in partnership with UIC to protect ground water sources of drinking water.		3,852	2,766		Wells

Baseline: As of January 2000, no states had adopted the Class V Rule as the Rule was just finalized in December 1999.

River/Lake Assessments for Fish Consumption

In 2003	Reduce consumption of contaminated fish by increasing the information available to States, Tribes, local governments, citizens, and decision-makers.
In 2001	9% of the nation's river miles and 23% of nation's lake acres have been assessed to determine if they contain fish and shellfish that should not be eaten or should be eaten in only limited quantities.
In 2000	7% of the nation's river miles and 16% of the nation's lake acres have been assessed to determine if they contain fish and shellfish that should not be eaten or should be eaten in only limited quantities.
In 1999	7% of river miles and 15% of lake acres were assessed for the need for fish advisories.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Lake acres assessed for the need for fish advisories and compilation of state-issued fish consumption advisory methodologies. (cumulative)		16	23		29	% lake acres
States/Tribes monitoring and conducting assessments based on the national guidance to establish nationally consistent fish advisories.	25	40	40/41		45	States/Tribes
River miles assessed for the need for fish consumption advisories & compilation of state-issued fish consumption advisory methodologies. (cumulative)	7	7	9		11%	River miles

Baseline: In 1999, 7% of the Nation's rivers and 15% of the Nation's lakes were assessed to determine if they contained fish that should not be eaten or should be eaten in only limited quantities. In September 1999, 25 states/tribes are monitoring and conducting assessments based on the national guidance to establish nationally consistent fish advisories. In the upcoming 2000 Report to Congress on the National Water Quality Inventory, 69% of assessed river and stream miles; 63% of assessed lake, reservoir, and pond acres; and 53% of assessed estuarie square miles supported their designated use for fish consumption. For shell fish consumption, 77% of assessed estuary square miles met this designated use.

Increase Information on Beaches

In 2003 Reduce human exposure to contaminated recreation waters by increasing the information available to the public and decision-makers.

In 2001 Reduce exposure to contaminated recreation waters by providing information on 2,354 beaches for which monitoring and closure data is available to the public and decision-makers.

In 2000 1,981 beaches had monitoring and closure data including 150 digitized maps, available to the public through EPA's website.

In 1999 Data entered for 26 states into the public right-to- know database on beach monitoring and closure.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Beaches for which monitoring and closure data is available to the public at http://www.epa.gov/OST/beaches/. (cumulative)		1,981	2,354		2,450	Beaches
Number of eligible States that have started/completed development of monitoring and notification programs consistent with the BEACHES legislation.					15/5	States
Fish tissue samples collected (cumulative).		128				Samples

States for which data is entered into the public right-to-know database on beach monitoring and closures.	26	States

Baseline: By the end of FY1999, 33 states had responded to EPA's first annual survey on state and local beach monitoring and closure practices, and EPA made available to the public via the Internet information on conditions at 1,403 specific beaches. In the upcoming 2000 Report to Congress on the National Water Quality Inventory, 72% of assessed river and stream miles; 77% of assessed lake, reservoir, and pond acres; and 85% of assessed estuarie square miles met their designated uses for recreation (primary contact).

Source Water Protection

In 2003 39,000 community water systems (representing 75% of the nation's service population) will have completed source water assessments and 2,600 of these (representing 10% of the nation's service population) will be implementing source water protection programs.

In 2001 States and community water systems increase efforts and programs to protect their source water resources, including ground water.

In 2000 49 States and 5,000 community water systems increased efforts and programs to protect their source water resources including ground water.

In 1999 11,011 community water systems are implementing programs to protect their source water.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Population served by community water systems that are implementing efforts to protect their source water resources.		30.5				People
CWSs implementing efforts to protect their source water resources.		5,000	2,026			CWSs
Number of community water systems and percent of population served by those CWSs that have completed their source water assessments.					75%/39,000	Percent/systems
Number of community water systems and percent of population served by those CWSs that are implementing source water protection programs.					10%/2,600	% pop/systems
CWSs with ground or surface water protection programs in place	11,011					CWSs
States that are implementing their EPA-approved source water protection assessment programs.		49				States

Baseline: EPA has defined implementation as undertaking 4 or more of 5 stages of source water protection. Nearly 264 million people are estimated to be served by CWSs in 2001.

Research

Drinking Water Research

In 2003 The Office of Water will have data, methods, assessments, and technology evaluations necessary to make scientifically sound risk assessment and risk management decisions on unregulated drinking water contaminants of potential public health concern.

In 2001 EPA reduced uncertainties and improved methods associated with the assessment and control of risks posed by exposure to microbial contaminants in drinking water with a focus on the emerging pathogens on the CCL.

In 2000 EPA completed reports that provide important information about new DBPs in drinking water, the risks that may be posed by exposures to mixtures of these contaminants, and methods for improving the interpretation of data from published DBP epidemiology studies.

In 2000 EPA reduced uncertainties and improved methods associated with the evaluation and control of risks posed by exposure to arsenic in drinking water by completing the products below and other research activities.

In 2000 EPA reduced uncertainties and improved methods associated with the evaluation and control of risks posed by exposure to microbial contaminants in drinking water by completing the products below and other research activities.

In 1999 An interim report on modeling methods for estimating the vulnerability of ground water to viral contamination is delayed until the end of FY 2001.

In 1999 Produced data on the role of micronutrient status on the metabolism/toxicity of arsenic, as well as data on the first city study on microbial enteric disease. In addition, completed hazard identification and screening studies on reproductive/developmental effects of selected DBPs.

In 1999 The draft Comparative Risk Framework Methodology and Case Study was provided to the Science Advisory Board (SAB) Drinking Water Subcommittee for its review.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Data on first city study on microbial enteric disease.	30-Sep-1999					
Complete hazard i.d./screening studies on reproductive/developmental effects of selected DBPs.	30-Sep-1999					
Interim report on modeling methods for estimating the vulnerability of ground water to viral contamination.	30-Sep-2001					
Report assessing the feasibility of attaining/constructing refined DBP exposure information for extant epidemiologic drinking water studies.		1				report

Report on the identification of new DBPs in drinking water formed by alternative disinfectants.		1			report
Complete a peer-reviewed report on the impacts of mixtures of selected DBPs on cancer and various noncancer endpoints, including reproduction and developmental effects, from animal studies.		1			report
Report on waterborne disease outbreaks in the U.S.		1			report
Evaluation of Method 1622 for Cryptosporidium for use in the Information Collection Rule.		1			evaluation
Describe different technologies for cost/effective control of Cryptosporidium oocysts and DBPs.		30-Sep-2002			description
Report summarizing the results of two additional treatment evaluations for arsenic control.		1			report
Add comparative Risk Framework Report	1 Report				
Report on occurrence of CCL-related pathogens in source and drinking water, such as mycobacterium and Aeromonas			1		report
Publish screening treatability studies for at least two microbes on the Candidate Contaminant List (CCL) to determine if these contaminants are effectively inactivated by conventional treatment.			2		studies
Report on the potential health risks associated with three CCL microbial pathogens.				1	report
Develop methodology to identify and characterize H. pylori, Cyclospora, caliciviruses and sources of human pathogens in water.				1	method
Publish a technical report on treatability of three chemicals in the 1998 Contaminant Candidate List to provide information to the program office for use in the regulatory determination.				1	report
Report on waterborne disease in the young and elderly in Washington State community intervention study.				1	report
Provide report on hazard and risk characterization issues for potentially susceptible subpopulations for chemicals on the Contaminant Candidate List				1	report

Baseline: The Safe Drinking Water Act Amendments of 1996 establish a process and timeline for EPA to make decisions about the regulation of waterborne pathogens and chemicals for which standards have not been previously established. The ability of EPA to identify potential candidates for regulation and to make scientifically sound regulatory decisions is dependent upon the availability of adequate information concerning the assessment and control of these contaminants. The current list of unregulated microbes and chemicals, called the Contaminant Candidate List (CCL), includes over 60 contaminants. The quality and robustness of the data base on health effects, exposure and treatability of these contaminants is highly variable. Some microorganisms on the CCL, for example, lack suitable analytical methods that are necessary for determining their viability and occurrence in drinking water samples. Basic information on the health effects of selected CCL chemicals are lacking, and the ability of conventional treatment technologies to remove or inactivate some of the contaminants has not been clearly established. Research conducted in support of this APG will provide new health effects and exposure data, analytical methods, risk assessments and technological evaluations on several high priority pathogens and chemicals. This will strengthen the scientific foundation for the next CCL and for future regulatory determinations on these contaminants.

OBJECTIVE 02: PROTECT WATERSHEDS AND AQUATIC COMMUNITIES

By 2005, increase by 175 the number of watersheds where 80 percent or more of assessed waters meet water quality standards, including standards that support healthy aquatic communities. (The 1998 baseline is 501 watersheds out of a national total of 2,262.)

Assessments of Designated Uses

In 2003 Assess, restore and protect watersheds.

In 2001 Assessed 132.1 river miles/lake acres, and 6,057 square estuary square miles that have water quality supporting designated uses, where applicable, for drinking water supply.

In 2001 Continued to restore and protect watersheds through implementation of over 2,300 TMDLs.

In 2000 Improved assessment of progress toward attainment of designated uses as indicated by electronic 305(b) submissions from 43 States, Tribes, and Terriotites.

In 2000 Of the 2,674 water segments previously identified and analyzed by states as being polluted, states submitted TMDLs for 2,167 water segments. EPA approved 1,276 TMDLs submitted by states, and EPA established 166 TMDLs. Due to the large number of TMDLs submitted, not all TMDLs were addressed.

In 1999 29 States have electronically updated their 1998 305(b) information which reflected adequate monitoring and assessment programs (Base of 0).

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Assessed river miles/lake acres/estuary square miles that have water quality supporting designated beneficial uses, where applicable, for drinking water supply.			132K/6M		no target	Mi/Acres
Assessed river miles, lake acres, and estuary square miles that have water quality supporting designated beneficial uses, where applicable, for fish and shellfish consumption.			174K/5M/7K		no target	Mi/Acres/Sq Mi
Assessed river miles, lake acres, and estuary square miles that have water quality supporting designated beneficial uses, where applicable, for recreation.			269K/10M/18K		no target	Mi/Acres/Sq Mi
TMDLs established by EPA. (cumulative)		166	870		1,245	TMDLs
TMDLs scheduled to be completed by the end of 2001. (cumulative)		2,674	3,826			TMDLs
Impaired, assessed river miles, lake acres, & estuary square miles that a) are covered under WRAS and b) were restored to their designated uses during the reporting period.						
Assessed river miles, lake acres, and estuary square miles that have water quality supporting designated beneficial uses, where applicable, for aquatic life support.			406K/9M/11K		no target	Mi/Acres/Sq Mi
TMDLs submitted by the state. (cumulative)		2,167	2,882			TMDLs
State-established TMDLs approved. (cumulative)		1,276	2,872		9,200	TMDLs
States electronically submit updated 305(b)	29					States
States, Tribes, and Territories electronically submit updated 305(b).		43				States, etc.
Submission, with Nat'l Watershed Forum, of a Watershed Rest. Progress Report to the President, etc. eval. progress & recommend. any actions needed to improve progress toward meeting clean water goals.		0				Report

Baseline: From the upcoming 2000 Report to Congress on the National Water Quality Inventory, the miles/aces quantities reported in the FY 2001column translate into the following percentages of waters: 66% of assessed river and stream miles; 73% of assessed lake, reservoir, and pond acres; and 49% of assessed estuary square miles have water quality supporting designated beneficial uses for aquatic life support. Likewise 69% of assessed river and stream miles, 63% of assessed lake, reservoir and pond acres, and 53% of assessesd estuary square miles have water quality supporting their designated

use for fish consumption. 86% of assesssed river and stream miles and 83% of lake, reservoir and pond acres support their designated use for drinking water supply.

Watershed Protection

In 2003 By FY 2003, Water quality will improve on a watershed basis such that 600 of the Nation's 2,262 watersheds will have greater than 80 percent of assessed waters meeting all water quality standards, up from 500 watersheds in 1998.

In 2001 Water quality improved on a watershed basis such that 510 of the Nation's 2,262 watersheds will have greater than 80 percent of assessed waters meeting all water quality standards, up from 500 watersheds in 1998.

In 2000 Environmental improvement projects are underway in 324 high priority watersheds which are resulting in real water quality improvements in impaired watersheds.

In 1999 23 States submitted implementation plans to EPA (either as separate plans or as part of water quality management plans or other watershed planning process) that describe the processes for implementing TMDLs developed for waters impaired solely or primarily by nonpoint sources.

In 1999 As part of the Clean Water Action Plan, 56 states and territories and 84 tribes are conducting or have completed unified watershed assessments, with support from EPA, which identified aquatic resources in greatest need of restoration or prevention activities.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Watersheds that have greater than 80% of assessed waters meeting all water quality standards.			510		600	8-digit HUCs
States submitting implementation plans for TMDLs for waters impaired solely or primarily by NPS	23					States
States that are conducting or have completed unified watershed assessments	56					States
High priority watersheds in which environmental improvement projects are underway as a result of implementing activities under the CWAP.		324				Watersheds

Baseline: As of 1998 state reports, 500 watershed had met the criteria for water quality improving on a watershed basis. For a watershed to be counted toward this goal, at least 25% of the segments in the watershed must be assessed within the past 4 years consistent with assessment guidelines developed pursuant to section 305(b) of the Clean Water Act.

State/Tribal Water Quality Standards

In 2003	36 Percent of Tribes will have water quality monitoring and assessment programs appropriate for their circumstances and will be entering water quality data into EPA's national data systems.
In 2003	Assure that States and Tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.
In 2001	21 States and 19 Tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.
In 2001	22% of Tribes have water quality monitoring and assessment programs appropriate for their circumstances and will be entering water quality data into EPA's national data systems
In 2000	35 States and 16 Tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.
In 1999	EPA reviewed and approved 17 revised water quality standards for 17 states that reflect current guidance, regulation, and public input and promulgated replacement Federal standards for 1 additional state.
In 1999	One additional Tribe established an effective water quality standards program for a cumulative total of 15 Tribes with effective water quality standards programs. In addition, 7 more tribal submissions are currently under review.
In 1999	Provided to States and Tribes tools for risk characterization of and decision making regarding surface water contaminants, including PBTs and nutrients, that allow them to set and meet their own water quality standards.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Tribes with monitoring and assessment programs. (cumulative)			22		36	% Tribes
Pilot STORET/305(b) reporting projects with Tribes.			2			Pilot projects
States with new or revised water quality standards that EPA has reviewed and approved or disapproved and promulgated federal replacement standards.			21		20	States
States and tribes with approved E. coli or enterococci criteria.					55	States
States with new or revised water quality standards that EPA has reviewed and approved or disapproved.	17					States
Models,methods,criteria developed/available for risk characterization of surface water contaminants.	1					List

Tribes with water quality standards adopted and approved (cumulative).	15	16	19		30	Tribes

Baseline: In 1999, less than 5% of tribes had water quality monitoring and assessment programs appropriate for their circumstances and were entering water quality data into EPA's national data systems. State water quality standards program reviews are under a 3-year cycle as mandated by the Clean Water Act under which all states maintain updated water quality programs. The performance measure of state submissions (above) thus represents a "rolling annual total" of updated standards acted upon by EPA, and so are neither cumulative nor strctly incremental. EPA must review and approve or disapprove state revisions to water quality standards within 60-90 days after receiving the state's package. As of this May EPA was overdue in approving or disapproving 38 new or revised standards from 21 states and tribes.

Protecting and Enhancing Estuaries

In 2003 Restore and protect estuaries through the implementation of Comprehensive Conservation and Management Plans (CCMPs).

In 2001 Restored and protected 70,000 acres of estuaries through the implementation of Comprehensive Conservation and Management Plans (CCMPs).

In 2000 Completed Comprehensive Conservation and Management Plans (CCMPs) for 1 of the National Estuary Programs for a cumulative toal of 22 out of 28.

In 1999 Completed Comprehensive Conservation and Management Plans (CCMPs) for 4 of the National Estuary Programs for a cumulative total of 21 out of 28.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Priority actions or commitments initiated nationwide as part of the National Estuary Program since approval of the first CCMP in 1991. (cumulative)			83			Actions
Acres of habitat restored and protected nationwide as part of the National Estuary Program. (annual)			70,000		25,000	Acres
Completed CCMPs	21	22				CCMPs

Baseline: As of January 2000, it is estimated that 65% of priority actions initiated and 400,000 habitat acres preserved, restored, and/or created.

Gulf of Mexico

In 2003 Assist the Gulf States in implementing watershed restoration actions in 14 priority impaired coastal river and estuary segments.

In 2003 Support projects with the goal of creating, restoring, or protecting 2400 acres of important coastal and marine habitats per year (incremental).

In 2001 Assisted the Gulf States in implementing watershed restoration action strategies (WRAS) or their equivalent in 37 priority coastal river and estuary segments.

In 2000 Assisted the Gulf states in implementing watershed restoration action strategies (WRAS) or similar plans to restore waterbodies in 14 priority impaired coastal river and estuary segments.

In 1999 Initiated the development of marine conservation plans for Gulf Coast seagrasses in 3 Gulf States.

In 1999 Reduced the number of nonpoint sources contributing to the total load of fecal contamination and nutrients in Gulf waters, in three priority Gulf coastal watersheds.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Impaired Gulf coastal river and estuary segments implementing watershed restoration actions (incremental).		31	37		14	Segments
TMDLs (1) scheduled to be completed; (2) submitted by Gulf States for segments in the coastal watershed; and (3) established by EPA and; (4) Gulf State established TMDLs approved.			79 / 851 / 32			TMDLs
Assessed river miles, lake acres, and estuary square miles that a) are covered under WRAS and b) were restored to their designated uses during the reporting period.						Miles, etc.
Increase acreage and restore or protect coastal and marine habitats by 2009 (incremental).					2,400	Acres
Gulf states with marine conservation plans for seagrasses.	3					States
Gulf watersheds with State actions to reduce NPS loads to Gulf growing waters.	3					Watersheds

Baseline: There are currently 95 coastal watersheds at the 8-digit hydrologic unit code (HUC) scale on the Gulf coast. The Gulf of Mexico Program has identified 12 priority coastal areas for assistance. These 12 areas include 30 of the 95 coastal watersheds. Within the 30 priority watersheds, the Gulf States have identified 354 segments that are impaired and not meeting full designated uses under the States' water quality standards. 71 or 20% is the target proposed to reinforce Gulf State efforts to implement 5-year basin rotation schedules. The target of 71 is divided by 5 to achieve the goal for assistance provided in at least 14 impaired segments each year for the next 5 years.

Wetland and River Corridor Projects

In 2003 Support wetlands and stream corridor restoration and management and assessment/monitoring of overall wetland health.

In 2001 Supported 108 wetlands and stream corridor restoration and management projects and continued our efforts assessment/monitoring of overall wetland health.

In 2000 4 States/Tribes developed wetlands assessment and monitoring tools and provided financial assistance to 74 wetlands restoration (other than Five-Star) projects.

In 1999 EPA provided funding to restore wetlands and river corridors in 46 watersheds that met specific "Five Star Project" criteria relating to diverse community partnerships (for a cumulative total of 57 watersheds).

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Watershed-based wetland restoration projects to which EPA has provided financial support (other than 5-Star Projects) and/or has contributed significant technical assistance. (cumulative)		74	108			Projects
Watershed-/community-based wetlands/river corridor restoration projects funded by EPA's Five Star Program (cumulative).						Projects
Watershed-/community-based wetlands/river corridor restoration projects funded by EPA's Five Star Program.	57					Projects
States/tribes developing formal programs and wetlands assessment capacities, aimed toward measuring wetland gain, loss and/or deterioration.			0			States/Tribes
Watershed-based wetlands restoration projects to which EPA has provided financial assistance (including 5-Star projects) and/or has contributed significant technical assistance. (cumulative)					550	Projects

Baseline: Going into FY99, 11 states/tribes had met the criteria for establishing formal assessment/monitoring programs.

Chesapeake Bay Habitat

In 2003 Improve habitat in the Chesapeake Bay.

In 2001 Improved habitat in the Chesapeake Bay by reducing 48.1 million pounds of nitrogen, 6.84 million pounds of phospherous and restored over 69,000 acres of submerged aquatic vegetation.

In 2000 In the Chesapeake Bay watershed, 1,032 stream miles of migratory fish habitat was reopened through the provision of fish passages, construction and restoration of 11,000 acres of oyster habitat, and 41% of wastewater flow to the Bay was treated by Biological Nutrient Removal.

In 1999 Submerged aquatic vegetation acres increased to 63,500; 11,000 acres designated for aquatic reef habitat; 32% of wastewater flow treated by Biological Nutrient Removal; 79% of lands have voluntary integrated pest management practices; and 534 stream miles of migratory fish habitat have reopened.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Pounds reduction, from 1985 levels, of nitrogen and phosphorus loads entering Chesapeake Bay. (cumulative)			48.1 / 6.84 M			Pounds
Miles of streambank and shoreline restored with riparian forest buffers. (cumulative)			711		896	Miles
Wastewater flow to the Chesapeake Bay treated by biological nutrient removal. (cumulative)	32	41	47		58	% WW flow
Percent shallow waters that meet water clarity requirements for submerged aquatic vegetation.					15	% waters
Acres of submerged aquatic vegetation (SAV) present in the Chesapeake Bay. (cumulative)	63500	68,125	69,126		80,000	Acres
Acres of aquatic reef habitat designated, with construction and restoration of oyster reef habitat to occur within those areas.	11000	11,000				Acres
Agricultural, recreational and public lands that have voluntary integrated pest management (IPM) practice established in the Chesapeake Bay watershed (cumulative).	79					% lands
Stream miles of migratory fish habitat reopened through provision of fish passages. (cumulative)	524	1,032	816		1,243	Miles

Baseline: In 1985, 0% of wastewater flow had been treated by Biological Nutrient Removal. In 1989, 49 miles of migratory fish habitat was reopened. In 1984, there were 37,000 acres of submerged aquatic vegetation in the Chesapeake Bay. In 1988, voluntary IPM practices had been established on 2% of the lands in the Chesapeake Bay watershed.

Tribal Environmental Water Presence

In 2003 70 Percent of Tribes will have a "water program environmental presence" (i.e., one or more persons, as appropriate, with environmental capability to advise Tribal governments on developing and implementing programs).

In 2001 47% of Tribes have a "water program environmental presence" (i.e., one or more persons, as appropriate, with environmental capability to advise Tribal governments on developing and implementing programs).

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Tribes with a water program presence. (cumulative)			47		70	% Tribes

Baseline: As of 1999, approximately 20% of Tribes have a "water program environmental presence."

Research

Contaminated Sediments

In 1999 Submitted two journal articles for peer review on the biotreatment of PAH contaminated sediments and the treatment of chlorinated organics in sediment. This information will assist regulators in developing strategies to treat dredged contaminated sediments and thereby recover scarce CDF capacity.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Publish peer reviewed journal article on biotreatment of PAH contaminated sediment.	1 Article				
Publish peer reviewed journal article on treatment of chlorinated organics in sediment.	1 Article				

Baseline:

Scientific Rationale for Surface Water Criteria

In 2003 Provide the science and data management scheme for the 303(d) listing process to include classification systems for surface waters, watersheds, and regions so that states will have an improved and reliable means of identifying impaired water bodies.

In 2003 Provide updated models for stormwater management, and for allocating suspended solids and sediment loads, and related uncertainties for mixed land use watersheds so that state and local resource managers can make improved scientifically-based decisions that protect aquatic resources and human health

In 2001 Developed (and published jointly as part of Office of Water guidance) the framework for diagnosing adverse chemical pollutants in surface waters.

In 2000 EPA developed a conceptual framework for the diagnosis and assessment of water quality impairment in U.S. watersheds by completing the products below and other research activities.

In 2000 EPA developed the scientific rationale for numerical criteria for surface waters by completing the products below and other research activities.

In 2000 EPA identified the primary life support functions of surface waters that contribute to the management of sustainability of watersheds by completing the products below and other research activities.

In 1999 Completed reports on the requirements of submerged vegetation in coastal environments, and on predicting metal toxicity in sediments. In addition, developed a research strategy on the scientific gaps in the areas of developing and implementing biocriteria.

In 1999 Completed research strategy for integrating economic assessment with ecological risk assessment of aquatic stressors. Produced three publications on knowledge based approaches to watershed assessments, and a fourth on ecosystem classification and mapping.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Report on the requirements of submerged aquatic vegetation in coastal environments.	30-SEP-1999					
Develop and provide a research strategy for integrating economic assessment with ecological risk assessment of multiple aquatic stressors applied at two locations.	30-SEP-1999					
Complete Clinch and Powell Watershed Risk Assessment.			0			assessment
Develop a research strategy for development of numerical criteria for surface waters.		30-Sep-2000				requirements
Research strategy document to determine the impact of landscape changes on wetland structure and function.		1				strategy
Complete guidance document on acquiring data for conducting watershed analyses for multiple stressors and receptors.		1				guidance doc
Complete report on an assessment of the viability of natural attenuation as an option for the risk management of contaminated sediments.		1				assessment
Complete and publish a compendium of case studies illustrating the application of the Stressor Identification Guidelines.			1			compendium
Decision-support tools and guidance for watershed scale assessments; report on risk characterization for watersheds.			30-Sep-2001			
Report on Sediment Toxicity.			0			report
Classification frameworks for geographic regions and at the watershed, water body, and habitat scale.					1	report

Prepare a document for use by states to assist in modeling risk management options and restoration measures in waterbodies impaired due to suspended solids and sediment.	1	document
Complete report on selected methods for integrating ecological risk assessment and economics to support watershed decision-marking.	1	report

Baseline: The State and EPA implementation of processes to identify impaired waters and restore them via a wide array of programs, including the TMDL process, requires assessment of waters and listing them as impaired. Recent Congressionally directed National Academy of Sciences studies note that the Agency's approach to listing impaired waters (the 3030(d) process) is not complete (i.e., a substantial quantity of the Nation's waters remain un-assessed) and is not scientifically robust (it appears that some listed waters may be inappropriately identified or mis-characterized). Accordingly, ORD has embarked on a focused research program to develop the monitoring, diagnostic, and classification schemes to improve the Agency and State approaches to this listing process. While this is a national requirement, regional and watershed, as well as biological, differences must be factored into the process.

The States and other reporting and assessment entities have listed sediments as a major cause of water body and watershed impairment. Urban storm water has also been identified as a major source of impairment. In addition the National Academy of Science report on TMDLs has called for the increasing characterization and use of uncertainty in modeling for TMDLs. In the case of storm water management, TMDL guidance may require permits for storm water and hence the urgent need to both improve the science of modeling such systems and the additional need to include uncertainty analysis techniques as part of the modeling process. Accordingly, ORD's research has been directed to provide updates in the modeling capability for this important national problem and to increase the capability of modelers and TMDL analysts to provide more robust and cost-effective outcomes for water bodies impaired by sediments.

OBJECTIVE 03: REDUCE LOADINGS AND AIR DEPOSITION

By 2005, reduce pollutant loadings from key point and nonpoint sources by at least 11 percent from 1992 levels. Air deposition of key pollutants will be reduced to 1990 levels.

Reducing Industrial Pollutant Discharge

In 2001 Millions of pounds of industrial discharges of pollutants to the nation's waters were significantly eliminated through implementation of effluent guidelines.

In 2000 Industrial discharges of pollutants to the nation's waters were significantly reduced through implementation of effluent guidelines.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Reduction in loadings for toxic pollutants for facilities subject to effluent guidelines promulgated between 1992 & 2000, as compared to 1992 levels as predicted by model projections. (cumulative)		3.8	10.3			Pounds
Reduction in loadings for conventional pollutants for facilities subject to effluent guidelines promulgated between 1992 & 2000, as compared to 1992 levels as predicted by model projections. (cum)		472.7	557.0			Pounds
Reduction in loadings for non-conventional pollutants for facilities subject to effluent guidelines promulgated between 1992 & 2000, as compared to 1992 levels as predicted by model projections. (cum)		135.6	922.0			Pounds

Baseline: Loading reduction estimates are based on model projections from effluent guidelines promulgated between 1992 and 1999, with both the numbers of affected facilities and permits estimated. Flow data is not available for some point sources in PCS.

NPDES Permit Requirements

In 2003 Current NPDES permits reduce or eliminate loadings into the nation's waters of (1) inadequately treated discharges from municipal and industrial facilities (direct and indirect dischargers); and (2) pollutants from urban storm water, CSOs, and CAFOs.

In 2001 Maintaining current NPDES permits aid in the reduction or eliminatation of discharges into the nation's waters of inadequately treated discharges from municipal and industrial facilities; and pollutants from urban storm water, CSOs, and CAFOs.

In 2000 Current NPDES permits reduced or eliminated discharges into the nation's waters of (1) inadequately treated discharges from municipal and industrial facilities; and (2) pollutants from urban storm water, combined sewer overflows (CSOs), and concentrated animal feeding operations (CAFOs).

In 1999 513 communities implemented requirements in Stormwater Phase I permits (MS4s) and / or CSO Long Term Control Plans (LTCPs) that are anticipated to contribute to improvements in their local watersheds.

In 1999 71% of major point sources are covered by current NPDES permits.

In 1999 830 CSO communities (92%) are covered by permits or other enforceable mechanisms consistent with the 1994 CSO policy. (Note: this result may reflect overcounting and implementation of only portions of the CSO Policy.)

In 1999 An assessment of necessary elements of a comprehensive general permit has been developed to aid Regions and States in issuing permits to concentrated animal feeding operations.

In 1999	Cannot determine # of industrial and construction stormwater sources. Can determine # of states that issue permits. For all industrial activities operating in the state, 92% of states and territories and for construction sites over 5 acres, 88% of states and territories have current permits.
In 1999	It was determined that developing a national inventory of AFOs and estimates of pollutant loadings was not feasible since there are as many as 450,000 AFOs and rapid changes are occurring in a number of facilities.
In 1999	Quantified the number of AFOs that were permitted by EPA and states and the extent the permits included manure management requirements.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Major point sources are covered by current permits.		72	75		90%	Point Sources
States with current storm water permits for construction sites over 5 acres.		89	91			% States
States with general NPDES permits for CAFOs > 1,000 animal units or with individual NPDES permits for all CAFOs > 1,000 animal units consistent with the AFO Strategy and guidance.		48	59			% States
Permittees (among the approximately 900 CSO communities nationwide) that are covered by NPDES permits or other enforceable mechanisms consistent with the 1994 CSO policy.	92	90	87			% permittees
Minor point sources are covered by current permits.		70	75		84%	Point Sources
States with current storm water permits for all industrial activities operating in the state.		83	92			% States
Loading reductions (pounds per year) of toxic, non-conventional, and conventional pollutants from NPDES permitted facilities (POTWs, Industries, SIUs, CAFOs, SW, CSOs).					500 million	pounds
Pounds of pollutants prevented from being discharged into waters due to field technical assistance at 775 municipal wastewater treatment plants.					12,000	pounds
Permits on 303(d) listed waterbodies which implement EPA approved TMDLs.					90	% permits
Completion of AFO documents	1					Document
Inventory of Animal Feeding Operations/estimate loadings	0					Inventory
Quantity of AFOs which are permitted	1					List

Major point sources that have a current NPDES permit.	71	% Maj. Pt. Srcs
Communities that will have local watersheds improved by controls on CSOs and stormwater	513	Communities
Facilities w. a discharge requiring an indiv. permit that a) are covered by a curr. indiv. NPDES perm.; b) have expir. perm.; c) have applied but not been issued a perm.; & d) have perm. under appeal		
Storm water sources assoc. with indust. activity, construction sites over 5 acres, and desig. storm water sources (incl. municipal Phase I) that are covered by a current indiv. or gen. NPDES permit.	Not available	% SW sources

Baseline: As of May 1999, 72% of major point sources and 54% of minor point sources were covered by a current NPDES permit. At the end of FY99, 53 of 57 states/territories had current storm water permits for all industrial activities, and 50 of 57 had current permits for construction sites over 5 acres. In June 1999, 74% of approximately 900 CSO communities wre covered by permits or other enforceable mechanisms consistent with the 1994 CSO Policy. As of December 1999, approximately 14 states had current NPDES general permits for CAFOs and at least another 13 had issued one or more individual NPDES permits for CAFOs.

Construction Grant and Special Project Closeout

In 2003 Reduce point source loadings by closing out within 7 years projects funded under Clean Water Act Title II (construction grants) awarded after FY 91 and Special Project Stag Grants.

In 2001 Reduced point source loadings by expediting completion of 37 projects funded under Clean Water Act Title II (construction grants) and special project STAG grants.

In 2000 Reduced point source loadings by expediting completion of projects funded under Clean Water Act Title II (construction grants) projects and special project State and Tribal Assistance Grants (STAG).

In 1999 340 construction grants projects remain to be closed out.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Construction grants projects awarded after FY91 closed out within 7 years of grant award.			79			% grants
Construction grants projects awarded before FY92 remaining to be closed out.		175	138			Projects

Construction grants projects (both those awarded before FY92 and after FY91) remaining to be closed out.	340					Projects
Percentage of Construction Grants and Special Project Grants closed out within 7 years of award.					90	% grants
Special project STAG grants closed out within 7 years of grant award.			78			% Grants

Baseline: As of September 1998, 439 construction grants projects remained to be closed out, according to biannual reports from the Regions. As of September 1998, three special project STAG grants had been closed out according to biannual reports submitted by the EPA Regions to EPA Headquarters. Special project STAG grants were first established in 1994.

Effluent Guidelines

In 2003 Develop effluent guidelines that when implemented are expected to reduce pollutant loadings into surface waters.

In 2003 Develop regulations for cooling water intakes that when implemented are expected to reduce harm to aquatic life.

In 2001 Took final action on 1 and proposed 4 effluent guidelines limitations for industrial categories that contribute significantly to pollution of surface waters.

In 2000 Took action on effluent guidelines limitations for industrial categories that contribute significantly to pollution of surface waters.

In 1999 Took final action on one and proposed two effluent guidelines limitations for industrial categories that contribute significantly to pollution of surface waters.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of effluent guidelines proposed or promulgated.	2/1	1/4	4 / 1			Rules
Number of cooling water intake (316(b)) regulations proposed or promulgated.					1/1	Rules
At least 150 million pounds of pollutants eliminated from waters of the U.S. as a result of two final effluent guidelines.					150	million pounds

Baseline: Loading reduction estimates are based on model projections from the effluent guidelines, with both the numbers of affected facilities and permits estimated.

Clean Water State Revolving Fund: Annual Assistanc

In 2003	900 projects funded by the Clean Water SRF will initiate operations, including 515 projects providing secondary treatment, advanced treatment, CSO correction (treatment), and/or storm water treatment. Cumulatively, 8,800 projects will have initiated operations since program inception.
In 2003	Reduce point and nonpoint source loadings by managing the $34 billion in CWSRF assets to encourage use of state funds for state high-priority projects.
In 2001	933 projects funded by the Clean Water SRF initiated operations, including 400 projects providing secondary treatment, advanced treatment, CSO correction (treatment), and/or storm water treatment. Cumulatively, 7,452 SRF funded projects will have initiated operations since program inception.
In 2001	Reduce point and nonpoint source loadings by managing the $30 billion in CWSRF assets to encourage use of state funds for state high-priority projects.
In 2000	Effectively implemented the Clean Water State Revolving Fund (CW SRF) program to ensure annual assistance of approximately $2 billion.
In 1999	30 states met "pace of the program" measures for loan issuance and pace of construction.
In 1999	41 states and Puerto Rico conducted separate annual audits of their SRFs.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
CW SRF projects that have initiated operations. (cumulative)			7,452		8,800	SRF projects
States that are using integrated planning and priority systems to make CW SRF funding decisions. (cumulative)			16		20	States
States that meet or exceed "pace of the program" measures for loan issuance and construction (cumulative).	30	20	24			States
States and Puerto Rico that conduct separate annual audits of their CW SRFs	41	42	42			States
National CWSRF loans as a percentage of funds available, as measured by the ratio of cumulative loan agreement dollars to the cumulative funds available for loans. (base of 87.5% in 1999)					90 %	Ratio
EPA will report to Congress on the pace of the Clean Water State Revolving Fund Program.		1	1			Report

Baseline: The Agency's National Information Management System (NIMS) shows, as of July 1998, 39 states/territories were conducting separate annual audits of their SRFs and utilizing fund management principles. NIMS shows, as of June 1998, 25 states were meeting the "pace of the program" measures for

loan issuance, pace of construction, and use of repayments. As of September 1998, 8 states were using integrated planning and priority systems to make SFR funding decisions. NIMS shows 3,909 SRF projects initiated as of June 1998.

Improving Wastewater Sanitation in Indian Country

In 2003 Increase protection of human health in Indian Country by providing adequate wastewater sanitation to more of the 71,028 homes in Indian Country with inadequate wastewater sanitation systems.

In 2001 Increased protection of human health in Indian Country by providing adequate wastewater sanitation to over 10,000 homes in Indian Country with inadequate wastewater sanitation systems.

In 2000 Reduced, by 6%, the number of homes in Indian Country with inadequate wastewater sanittion systems.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Percent of homes in Indian Country whose residents are provided with adequate wastewater sanitation systems though funding from the CW SRF Tribal Set Aside Program. (cumulative)		6	14		26	% Homes

Baseline: Annual reporting established in FY 1998 by EPA and the Indian Health Service shows 71,028 homes in Indian Country without adequate treatment.

Wastewater Treatment Facility Compliance

In 2003 Enhance public health and environmental protection by securing the nation's critical wastewater infrastructure through support for homeland security preparedness, including vulnerability assessments, emergency operations planning, and system operator training.

In 2001 Protected human health and avoided increased point source loadings by permitting over 750 wastewater treatment systems to maintain permitted performance levels.

In 2000 872 Wastewater treatment facilities prevented from going into CWA non-compliance or assisted in moving toward compliance through assistance under CWA Section 104(g).

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Wastewater treatment facilities maintaining permitted performance levels through assistance under Section 104(g) of the CWA.		872	776			Facilities

Percent of the population served by, and the number of, large and medium-sized (10,001 and larger) Publicly Owned Treatment Works (POTWs) that have taken action for homeland security preparedness.	65%/5000	%pop/systems

Baseline: In 1998, 890 facilities were assisted to improve, maintain, or achieve compliance.

Wastewater Treatment

In 2003 Reduce human health risks and nonpoint source loadings from the approximately 11 million failing septic systems that pollute drinking water supplies, playgrounds and beaches, back up into homes and damage shellfish and other aquatic life.

In 2001 Reduced human health risks and nonpoint source loadings from the approximately 11 million failing septic systems that pollute drinking water supplies, playgrounds and beaches, back up into homes and damage shellfish and other aquatic life.

In 2000 Another two million people are receiving the benefits of secondary treatment of wastewater, for a total of 181 million people.

In 1999 Another 3.4 million people received the benefits of secondary treatment of wastewater, for a total of 179 million.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
States which adopt the Voluntary Management Guidelines for On-site Wastewater Treatment Systems.			0		4	States
CW SRF projects that have initiated operations. (cumulative)		6,519				SRF projects
Additional people who will receive the benefits of secondary or better treatment of wastewater	3.4	2.07				M People

Baseline: The Agency's National Information Management System shows 3,909 SRF projects initiated as of June 1998.

Reducing Nonpoint Source Pollution

In 2003 Reduce nonpoint source sediment and nutrient loads to rivers and streams.

In 2001 Reduced nonpoint source sediment and nutrient loads to rivers and streams by ensuring that 5% of AFOs have developed Comprhensive Nutruient Management Plans (CNMPs).

In 2000 49 States upgraded their nonpoint source programs, to ensure that they are implementing dynamic and effective nonpoint source programs that are designed to achieve and maintain beneficial uses of water.

In 1999 In support of the Clean Water Action Plan, 11 additional states have upgraded their nonpoint source programs, to ensure that they are implementing dynamic and effective nonpoint source programs that are designed to achieve and maintain beneficial uses of water.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
AFOs for which Comprehensive Nutrient Management Plans (CNMPs) are developed. (cumulative)			5%			AFOs
Clean Water SRF loaned for projects to prevent polluted runoff.		6	6			% CW SRF
Number of coastal States and Territories with fully approved coastal nonpoint pollution control programs under the Coastal Zone Act Reauthorization Amendments of 1990. (cumulative)					29	States/Tribes
Clean Water SRF loaned for projects to prevent polluted runoff. (annual)					200	M Dollars
EPA approvals of state submitted upgraded nonpoint source programs (incorporating the 9 key elements outlined in national Nonpoint Source Program and Grants Guidance for FY97 and Future Years).	11	49				States

Baseline: As of September 1998, 24 states were funding nonpoint and estuary projects with their SRFs.

GOAL 03: SAFE FOOD

The foods Americans eat will be free from unsafe pesticide residues. Particular attention will be given to protecting subpopulations that may be more susceptible to adverse effects of pesticides or have higher dietary exposures to pesticide residues. These include children and people whose diets include large amounts of noncommercial foods.

OBJECTIVE 01: REDUCE RISKS FROM PESTICIDE RESIDUES IN FOOD

By 2006, reduce public health risk from pesticide residues in food from pre-Food Quality Protection Act (FQPA) levels (pre-1996).

Decrease Risk from Agricultural Pesticides

In 2003	Decrease adverse risk from agricultural uses from 1995 levels and assure that new pesticides that enter the market are safe for humans and the environment, through ensuring that all registration action are timely and comply with standards mandated by law.
In 2001	The Agency registered 9 new chemicals, exceeding its target by 2, and 267 new chemicals, underperforming its target by 83.
In 2001	The registration of new agricultural pesticides, and reregistration of older agricultural pesticides, were done under the strict health-based standard of FQPA: "reasonable certainty of no harm." "Safer" pesticides are those that meet a stricter set of criteria.
In 2000	The Registration Program completed registrations for 9 new chemicals, 3069 amendments, 1106 me-toos, 427 new uses, 95 inerts, 458 special registrations, 452 tolerances, and 13 reduced risk chemicals/biopesticides.
In 1999	In FY 1999, EPA registered 19 additional reduced risk pesticides, including 13 biopesticides. EPA established 351 new pesticide food tolerances and acted on 681 proposed new pesticide uses, ensuring that all meet the new health safety standard of "reasonable certainty of no harm."

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Register safer chemicals and biopesticides	19	13	92		118	Regist. (Cum)
New Chemicals	7	9	53		67	Regist. (Cum)
New Uses	681	427	1896		2679	Actions (Cum)

Baseline:	The baseline year is 1996; baseline quantities are 0. 1996 is the year FQPA was enacted with its new risk reduction, safety standard "reasonable certainty of no harm" for pesticides used on foods. Cumulative totals measured from baseline for safer chemicals, biopesticides, new chemicals, and new uses are displayed because this more clearly shows progress implementing FQPA than would a display of single-year results.

Reduce use of highly toxic pesticides

In 2003 Occurence of residues of carcinogenic and cholinesterase inhibiting neurotoxic pesticides on foods eaten by children will have decreased by 20 percent (cumulative) from their average 1994 to 1996 levels.

In 2001 Data will be available in March 2002.

In 2000 Due to regulatory actions and trends in usage, we are seeing a larger decrease (15%) in the use of carcinogenic or neurotoxic pesticides than expected. We anticipate that this trend will continue.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Reduction of detections on a core set of 19 foods eaten by children relative to detection levels for those foods reported in 1994-1996.		15%			20%	Reduced Detect.

Baseline: Percent occurrence of residues of FQPA priority pesticides (organophosphates and carbamates) on samples of children's foods in baseline years 94-96. Baseline percent is 33.5% of composite sample of children's foods: apples, apple juice, bananas, broccoli, carrots, celery, grapes, green beans (fresh, canned, frozen), lettuce, milk, oranges, peaches, potatoes, spinach, sweet corn (canned and frozen), sweet peas (canned and frozen), sweet potatoes, tomatoes, and wheat.

Reduced Risk Pesticides

In 2003 At least six percent of acre-treatments will use applications of reduced risk pesticides.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Percentage of acre treatments with reduced risk pesticides					6%	Acre Treatments

Baseline: Baseline is 1998 acre-treatments: 3.6% of total acreage. Each year's total acre-treatments (all pesticides and reduced risk pesticides), reported by USDA's National Agricultural Statistical Survey (NASS), serve as the basis for computing the percentage of acre-treatments using reduced risk pesticides. Acre-treatments count the total number of pesticide treatments each acre receives each year.

OBJECTIVE 02: ELIMINATE USE ON FOOD OF PESTICIDES NOT MEETING STANDARDS

By 2008, use on food of current pesticides that do not meet the new statutory standard of "reasonable certainty of no harm" will be eliminated.

Reassess Pesticide Tolerances

In 2003	Assure that pesticides active ingredients registered prior to 1984 and the products that contain them are reviewed to assure adequate protection forhuman health and the environment.Also consider the unique exposure scenarios such as subsistence lifestyles of Native Americans in regulatory decisions.
In 2003	By the end of 2003 EPA will reassess a cumulative 68% of the 9,721 pesticide tolerances required to be reassessed over ten years and complete reassessment of a cumualtive 75% of tolerances of special concern in protecting the health of children.
In 2001	EPA reassessed 40% of tolerances requiring reassessment under FQPA and issued a cumulative 72% of total REDs required, achieving both targets.
In 2001	EPA reregistered 856 products, exceeding its target by 14%.
In 2000	We did not achieve our FY2000 target for tolerance reassessments due to the ongoing work to establish a science policy on cumulative risk. Although we missed our annual target, we are still on track to meet our statutory deadlines to reassess all tolerances.
In 1999	Tolerances reassessed by EPA through Sept. 30, 1999 totaled 35%, exceeding both our cumulative target and the statutory deadline of reassessing 33% of the existing tolerances by Aug. 1999.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Tolerance Reassessment	1445	121	40%		68%	Tolerances(Cum)
REDs	14	6	71.6%		83%	Decisions (Cum)
Product Reregistration	746	552	856		750	Actions
Tolerance reassessments for top 20 foods eaten by children			43.5%		75%	Tolerances(Cum)

Baseline: The baseline value for tolerance reassessments is 9,721 tolerances that must be reassessed using FQPA health and safety standards; REDs is 612 REDs that must be completed; product reregistration is under development; and tolerances reassessed for the top 20 foods eaten by children is 893. Cumulative totals for tolerances reassessed and REDs are displayed because this more clearly shows progress in implementing FQPA than would a display of single-year results shown in earlier years.

GOAL 04: PREVENTING POLLUTION AND REDUCING RISK IN COMMUNITIES, HOMES, WORKPLACES AND ECOSYSTEMS

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.

OBJECTIVE 01: 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.

Agriculture Partnership

In 2003	Focus partnership development that indicates a successful transition on minor use commodity groups which use high risk pesticides (organoposphates, 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 2001	EPA began implementation of 12 model agricultural pilot projects.
In 2000	Agricultural partnerships were initiated in four pilot regions: 4, 6, 9, and 10. OPPTS' goal was exceeded due to R10's initiating several mini grants for start up projects.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Model agricultural partnership pilot projects		15	12			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.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Pesticides with high leaching and persistence potential managed to protect groundwater					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.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Species on priority list jeopardized					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.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Reported incidents involving mortalities to birds and fish					20%	Reduction

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

OBJECTIVE 02: 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.

Lead Regulatory Standards

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

In 2000 A change in RCRA policy in August 2000 eliminated the need for issuance of this rule and accomplished its objectives.

In 1999 In FY 1999, EPA initiated two regulations necessary for a national program to address the hazards from lead-based paint. The Lead Debris Disposal Rule was proposed in December 1998. Comment review and final rule development for the Lead Hazard Standards Rule continued in 1999.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Lead Debris Disposal Rule	Comments	Withdrawn				Rule
Lead Hazard Standards Rule - develop final	Comments	Final	1 final			Rule

Baseline:

Safe PCB Disposal

In 2003 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 Transfomer Reclassicifcation Rule was published on April 2, 2001.

In 2000 The data on FY 2000 PCB disposals will be available by May 1, 2002.

In 1999 Technical Corrections to the 1998 PCB Disposal Amendments was issued on 6/24/99. The PCB Transformer Reclassification Rule will be promulgated in FY 2000. EPA published a notice in the FR in October 1999 soliciting additional information to support the Non-Liquid PCB Use Authorization Rule.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Revisions to PCB Disposal Amendments, Non-liquid PCB use authorization, Transboundary movement of PCBs	1					Proposed
Safe Disposal of Transformers		Avail. 5/02	Avail. 9/1/02		10000	Transformers
Safe Disposal of Capacitors		Avail. 5/02	Avail. 9/1/02		25000	Capacitors
Safe Disposal of Bulk Waste		Avail. 5/02	Avail. 9/1/02		660,000,000	Kg Bulk Waste
Develop Final Transformer Reclassification Rule		Delayed				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 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.

In 2000 Additional legal requirements for lead-based paint abatement certification and training for the tribes has delayed development of two tribal programs.

In 2000 The lead rules for lead paint abatement/renovation and remodeling and building/superstructures were not met due to the lengthy SBREFA process and FTE cuts.

In 1999 Development continued training, accreditation and certification rules: 1) renovation and remodeling activities and 2) deleading on bridges and structures. When these rules are promulgated, a full set of national standards for safe, effective reduction of lead-based paint hazards will be place.

In 1999 EPA continued building the lead-based paint abatement certification and accreditation program by approving 30 state and territory and two tribal programs. In 17 states that do not take on the program, EPA will run certification and accreditation.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Develop state programs for the training, accreditation and certification of lead-based paint abatement professionals.	28	36				States
Lead Renovation Information Rule	Final					Rule
A Federal training, accreditation and certification program will be established and administered in states which choose not to seek approval from EPA to administer.	22	19				Federal
Develop proposed rules for lead paint abatement/ renovat. & remod. and bldg./super. rule	2 Proposed	Delayed				Rules
Develop tribal programs for training, accreditation and certification of lead-based paint abatement professionals.		2				Trib.Prog (cum)
Evaluate results from pilot test of indicators and modify for implementation nationwide.						Analysis
Building and Superstructure Rule					1 Proposed	Rule

Certified individuals only in states with federally administered program	>2,000		Certified
Certified nationally (federally-administered and state-administered program)		5000	Certified
Number of Abatements		pilot (TBD)	Notifications
Pilot Regional effort to monitor reduction in lead exposures		3	Regions
Renovation and Remodeling Rule	incomplete	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.

OBJECTIVE 03: 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.

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 2001 EPA reviewed 1,770 Premanufacturing Notices. By the end of 2001, 21 percent of all chemicals in commerce had been assessed for risks.

In 2000 All new chemical pre-manufacturing notification submissions were reviewed within the required timeframe.

In 1999 EPA used TSCA authorities to review 1,717 premanufacture notices (PMNs) and exemptions. EPA took control actions on 20 of the 31 notices involving PBTs. EPA received 172 toxicity tests on over 103 chemicals.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
TSCA Pre-Manufacture Notice Reviews	1717	1838	1770		1800	Notices
Notice of Commencements			21.0		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 Dis

In 2003 Through the priority setting process, narrow the universe of 87,000 chemicals to identify those that are potential endocrine disruptors.

In 2001 The two screening assays were not completed.

In 2000 In addition to the 2 planned endocrine disruptor screening assays, EPA started the 2-generation mammalian assays.

In 1999 The Agency completed a number of key activities in FY 1999 including the High-Throughput Pre-Screening (HTPS) feasibility demonstration study, initiated the development of a Priority Setting Database, and started work on standardization of several screens and tests for use in the EDSP.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Develop program to screen 5,000 chemicals for endocrine disruption potential	Developed					Program
Screening Assays Completed		4				Screening assay
Federal Register Notice on the proposed first list of chemicals for Tier 1 Screening.					1	FR Notice

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 contaminiants, food additives, pharmaceuticals, cosmetics, nutritional supplements, and representative mixtures. "Priority-setting" refers to the determination of priorites for entry into Tier 1 Screening.

Chemical Right-to-Know Initiative

In 2003 Provide information and analytical tools to the public for assessing the risks posed by toxic chemicals.

In 2001 Data was obtained from test plans submitted by industry for 724 chemicals already in commerce.

In 2000	Industry's response to the HPV Challenge was greater than expected. Industry provided EPA with significantly more test data and voluntary agreements on high production volume chemicals than was expected.
In 2000	The goal of providing information and analytical tools to the public was not met due to a shift to other priorities. The community partnership initiating the second community analysis has made slow progress.
In 1999	EPA challenged industry to take responsibility for collecting data on the effects of the chemicals they manufacture and over 200 companies and consortia had voluntarily committed to make public, before the end of 2005, basic hazard data on over 1,150 of the approx. 2,800 HPV chemicals.
In 1999	The TRI Persistent Bioaccumulative Toxics rule was proposed. The final rule was published in the Federal Register in October 1999 (FY 2000).

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
TSCA Chemical Inventory Update Rule	Proposed					Rule
Addition of PBTs to TRI rulemaking	Final					Rule
Under chemical right-to-know activities, secure voluntary agreements from chemical manufacturers to test high production volume chemicals		2155				Chemicals
Through chemical testing program, obtain test data for high production volume chemicals on master testing list.		181	724			Chemicals
Provide current national risk screening information to the public		0			1	Tools
Completion of community risk identification analyses		1			2	Analyses
Complete EPA-HQ risk-based priority setting exercise					5	Analyses
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
Make screening quality health and environmental effects data publicly available for 2,800 HPV chemicals					16%	Data (Cum)
Number of Peer Reviews Conducted with Industry					2	Reviews
Number of initiated/completed risk assessments for chemicals					4	Actions

Number of submissions using exposure assessment methods, databases, and models.	80%	Submiss. (cum)
Number of users of exposure assessment methods, databases, and models	500	Users
P2 and Risk Management Guidance Documents	1	Docs./Manual
Training Workshops	3	Workshops
Establish state toxics management programs	1	Pilot Programs

Baseline: Release of national risk screening information first occurred in FY99. First community risk identification analysis were completed in FY00. First National, Regional, and State level risk-based priority setting excercise will be completed in FY02. First expanded use of risk screening tool by other countries will occur in FY02. As data is collected it is available on http://www.epa.gov/chemtrk.

Expand Local Information on Toxic Substances

In 2001

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Provide current national risk screening information to the public			1			Tools
Completion of community risk identification analyses			2			Analyses

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

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
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).					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).					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.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of users of the PBT Profiler					100	Users
Number of Chemicals Profiled					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 1999	FY 2000	FY 2001	FY 2002	FY 2003	
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 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.

In 2000 EPA developed a model to assess the susceptibility of the developing immune system to environmental contaminants, yielding a product important for evaluating the impact of environmental stressors on human health and ecological endpoints.

In 1999 Completed summary of in vitro methods used to sort chemicals acting through one-electron reactive mode of toxic action, which will provide the Agency with an additional approach to the classification of potential ecological hazard posed by new and existing chemicals.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Peer reviewed publication on the in vitro screening methods for one-electron reactions.	1 Publication					
Develop an animal model to assess susceptibility of the developing immune system to environmental contaminants.		1				model
Guidance in the use of Structure Activity Relationships (SAR) computer technologies.			1			guidance
Use QSAR models and animal test methods to meet regulatory objectives associated with tiered human health and ecological risk assessments of commercial chemicals, microorganisms, and GMOs.					09/30/2003	methods

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.

OBJECTIVE 04: 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.

Healthier Residential Indoor Air

In 2003 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.

In 2000 1,032,000 additional people are living in healthier residential indoor environments.

In 1999 1,322,000 additional people are living in healthier residential indoor environments.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
People Living in Healthier Indoor Air	1,322,000	1,032,000	890,000		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 2001 An additional 1,930,000 students, faculty and staff are experiencing improved indoor air quality in their schools.

In 2000 2,580,000 students, faculty and staff are experiencing improved indoor air quality in their schools.

In 1999 1,050,000 students, faculty, and staff experienced improved indoor air quality in their schools.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Students/Staff Experiencing Improved IAQ in Schools	1,050,000	2,580,000	1,930,000		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.)

OBJECTIVE 05: 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.

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

In 2000 EPA exceeded its target of 50 Green Chemistry Challenge Award nominations.

In 1999 EPA received 136 nominations in five categories, more than two and a half times its target. The efforts upon which these nominations were based produced reductions in use and emmissions of hazardous substances, savings in capital investments, reduced worker exposure, and improved product yields.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Green Chemistry Challenge Award	134	74				Applications
Alternative feed stocks, processes, or safer products identified through Green Chemistry Challenge Award			75		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 2001 No conclusions can be drawn regarding changes in TRI Non-recycled wastes from calendar year 2000 to calendar year 2001 without data.

In 2000 EPA exceeded its target of a reduction of 200 million pounds of TRI pollutants released.

In 2000 Projections for Form Rs submitted are based on past year submissions.

In 1999 Total releases of toxic chemicals decreased by 38.8million pounds from 1995 thru 1997. The 1997 TRI data, however, reflect a continued increase in production related wastes. This increase is accompanied by a continued increase in the use of pollution prevention practices by industry.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Form Rs with Source Reduction activities (cumulative)		134,000				Facilities
Reduction of TRI non-recycled waste (normalized)	1.1B lbs incr.	405 Million	not available		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 2001 15 new PBT prevention / reduction projects initiated through regional offices in 2001. The list of additional priority PBTs was not published.

In 2000 Review of available information during examination of potential Level II PBT chemicals led to a broader list than originally expected.

In 1999 EPA published a draft agency-wide PBT Strategy and draft Mercury Action Plan. EPA initiated ten new projects with primary focus on reducing mercury use and emissions. EPA also completed seven draft national action plans, which address 11 of the remaining priority PBTs.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Initiate risk reduction actions in accordance with National Action Plan	11					Chemicals
Integrate level II chemicals into National Action Plans.		19				Chemicals

Number of prevention and reduction Regional projects initiated.	12	25	45	Grants (Cum)
Publish final list of additional priority PBTs.		0		List
Hospital Mercury Project			100	Participants
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 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.

In 2000 Supporting expanded P2 practices in a the garment and textile care industry , data for Jan.-Oct. 2000 indicates 348 wetcleaning machine sales. This is 36% over the 1998 base year. Projections based on the prior eight months were used for Nov. and Dec.

In 2000 The technical assessment of traditional and alternative ink formulations was delayed though completed in FY2000. Outreach activities began only after the assessment was complete. We expect to see the results of this work in FY 2001.

In 1999 Overall, the DfE program has formed partnerships with industry to reduce million of pounds of hazardous chemicals, reduce worker exposure, increase awareness of safer practices, and develop environmentally preferred products. Dry cleaners reduced perc use by 11 million pounds in 1998.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Percentage increase in the use of alternative cleaning technologies by garment care industry.	10%	36%				Use-cumulative
For inks, track size of flexographic ink industry and market share ($ and lbs) of cleaner inks.		0%	6%		15% (cum)	Market share
For adhesives, track size of cleaner adhesive industry market share.			65%		70% (cum)	Market Share
For eco-friendly detergents, track the number of laundry detergent formulator industry partners.			18		12	Partners (cum)

Perchloroethylene reduction	not available	40%	Use Reduct 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 2001 A draft trends report that shows changes from 1991 to 2000 was prepared in FY 2001 and is currently undergoing intergovernmental review.

In 2000 Goal not met. Due to an increase in scope of voluntary chemicals the final list on RCRA persistent, bio-accumulative and toxic (PBT) chemicals was not issued. EPA anticipates that the expanded list will be issued by September 2001.

In 1999 The schedule for finalizing the PBT List was delayed due to changes in the scope of effort. Based on public comments, EPA decided to expand the list to include other multi-media data.The schedule has been extended to include peer review of underlying data. EPA anticipates final publication in 2/00.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Issue final guidance on PBT Identification	0					document
Issue final PBT list.		0				list
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.					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 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.

In 2000 FY 2000 data is not available for the diversion of municipal solid waste from land filling and combustion (goal was an additional 1%) or maintaining per capita generation of RCRA municipal solid waste to 4.3 pounds per day. Analysis of FY 1999 data is anticipated by September 2001.

In 1999 In FY 1999, 28% or 64 million tons of municipal solid waste was diverted from land filling and combustion, and the per capita generation was raised to 4.6 pounds per day. Increased per capita generation is tied to robust economic expansion.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Millions of tons of municipal solid waste diverted.	64	Not Available	not available		74	million tons
Daily per capita generation of municipal solid waste.	4.6	Not Available	not available		4.5	lbs. MSW

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

OBJECTIVE 06: 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

Tribal Environmental Baseline/Environmental Priori

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 2001 Baseline environmental assessments were collected for 207 Tribes.

In 2000 16% of tribal baseline information was collected by enabling a pilot demonstration model to access and display tribal information from EPA databases and data collection surveys containing environmental information. However, only four EPA/Tribal Environmental Agreements (TEAs) were signed.

In 1999 10% of Tribal environmental baseline information was collected and 46 additional tribes have tribal/EPA environmental agreements or identified environmental priorities.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Tribal environmental baseline information collected	10	16				% Baseline
Tribes with Tribal/EPA environmental agreements or identified environmental priorities	46	4				Tribes
Environmental assessments for Tribes. (cumulative)			207			Tribes, etc.
Non-federal sources of environmental data pertaining to conditions in Indian Country.					20	Data sources

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.

GOAL 05: BETTER WASTE MANAGEMENT, RESTORATION OF CONTAMINATED WASTE SITES, AND EMERGENCY RESPONSE

America's wastes will be stored, treated and disposed of in ways that prevent harm to people and to the natural environment. EPA will work to clean up previously polluted sites, restore them to uses appropriate for surrounding communities, and respond to and prevent waste-related or industrial accidents.

OBJECTIVE 01: CONTROL RISKS FROM CONTAMINATED SITES AND RESPOND TO EMERGENCIES

By 2005, EPA and its federal, state, tribal, and local partners will reduce or control the risk to human health and the environment at more than 374,000 contaminated Superfund, RCRA, underground storage tank (UST), and brownfield sites and have the planning and preparedness capabilities to respond successfully to all known emergencies to reduce the risk to human health and the environment.

Leaking Underground Storage Tank Cleanups

In 2003 EPA and its partners will complete 22,500 Leaking Underground Storage Tank (LUST) cleanups for a cumulative total of approximately 313,300 cleanups since 1987.

In 2001 19,074 LUST cleanups were completed in FY 2001.

In 2000 EPA met its goal by completing 20,834 LUST cleanups, for a cumulative total of 249,760 since 1987.

In 1999 EPA completed 25,678 LUST cleanups.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
LUST cleanups completed.	25,678	20,834	19,074		22,500	cleanups

Baseline: EPA completed a total of 249,760 LUST cleanups from 1987 through 2000.

Superfund Removal Response Actions

In 2003 Conduct 275 Superfund removal response actions for a cumulative total of 7,138 removal response actions since 1982.

In 2001 EPA conduced 302 removal response actions, for a cumulative total of 6,588 over the life of the program.

In 2000 EPA exceeded its target by conducting 357 removal response actions, for a cumulative total of 6,286 over the life of the program.

In 1999 EPA exceeded the target by conducting 356 removal response actions.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Removal response actions.	356	375	302		275	removals
Amount of liquid based waste removed.					no target	gallons
Amount of solid waste removed.					no target	cubic yards

Baseline: EPA completed a total of 6,286 removal response actions from 1982 through 2000.

Superfund Cleanups

In 2003 EPA and its partners will complete 40 Superfund cleanups (construction completions).

In 2001 EPA completed construction at 47sites, achieving 804 construction completions over the life of the program.

In 2000 EPA met its target, attaining a total of 87 construction completions, for a cumulative total of 757 construction completions over the life of the program.

In 1999 EPA met the target of 85 construction completions.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Construction completions.	85	87	47		40	completions

Baseline: EPA completed a total of 757 construction completions from 1982 through 2000.

Superfund Cost Recovery

In 2003 Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than $200,000.

In 2000 Addressed cost recovery at 98.5% of NPL and non-NPL sites with a statute of limitations on total past costs equal to or greater than $200,000.

In 1999 We met our goal to ensure trust fund stewardship by recovering costs from PRPs when EPA expends trust fund monies. EPA addressed cost recovery at 99% of all National Priority List (NPL) and non-NPL sites with a statute of limitations on total past costs equal to or greater than $200,000.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Refer to DOJ, settle, or write off 100% of Statute of Limitations (SOLs) cases for SF sites with total unaddressed past costs equal to or greater than $200,000 and report value of costs recovered.	99%	98.5	97.8		100	Percent

Baseline: In FY 98 the Agency will have addressed 100% of Cost Recovery at all NPL & non-NPL sites with total past costs equal or greater than $200,000.

Superfund Potentially Responsible Party Participat

In 2003 Maximize all aspects of PRP particicipation which includes maintaining PRP work at 70% of the new remedial construction starts at non-Federal Facility Superfund, and emphasize fairness in the settlement process.

In 2001

In 2000 Maximize all aspects of PRP participation by maintaining PRP work at 68% of the new remedial construction starts at non-Federal Facility Superfund sites, while emphasizing fairness in the settlement process.

In 1999 Achieved >70% responsible party participation in new remedial actions at NPLsites. Goal met with the exception of completing 5 Sect 106 Civil Actions & 2 Remedial Admin Orders primarily due to a decline in the no. of sites available for Remedial Design/Remedial Action negotiation completions.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Section 106 Civil Actions	33					Agreements
Ensure fairness by making Orphan Share Offers at 100% of all eligible settlement negotiations for response work.	100%	100	100			Percent
Provide finality for small contributors by entering into De Minimis settlements and report the number of settlers.	38	18	15			Settlements
Remedial Administrative Orders	17					Orders
Administrative and judicial actions		100				actions
PRPs conduct 70% of the work at new construction starts			67.3		70	Percent

Baseline: In FY 98 approximately 70% of new remedial work at NPL sites (excluding Federal facilities) was initiated by private parties.

RCRA Corrective Action

In 2003	257 (for a cumulative total of 1,252 or 73%) of high priority RCRA facilities will have human exposures controlled and 172 (for a cumulative total of 1,054 or 61%) of high priority RCRA facilities will have groundwater releases controlled.
In 2001	EPA exceeded its RCRA corrective action goal for human exposures controlled with an additional 179 facilities, and came close to achieving its goal for groundwater releases controlled with an additional 154 facilities.
In 2000	EPA met its RCRA corrective action goal with an additional 191 of the high priority RCRA facilities having human exposures controlled, and an additional 168 high priority RCRA facilities having groundwater releases controlled.
In 1999	162 (for a cumulative total of 477 or 28%) of high priority RCRA facilities have human exposures controlled and 188 (for a cumulative total of 440 or 26%) have groundwater releases controlled.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
High priority RCRA facilities with human exposures to toxins controlled.	162	191	179		257	facilities
High priority RCRA facilities with toxic releases to groundwater controlled.	188	168	154		172	facilities

Baseline: EPA established a baseline of over 1,700 high priority corrective action facilities in January 1999.

Brownfield Site Assessment Grants

In 2003	EPA will provide additional site assessment funding to 74 new sites, and to 52 existing sites, resulting in a cumulative total of 3,350 properties assessed, the generation of 21,300 jobs, and the leveraging of $5.0 billion in cleanup and redevelopment funds since 1995.
In 2001	FY 2001 third quarter data shows cumulative totals of 2,594 site assessments, generation of 17,307 jobs and leveraging of $3.7 billion in cleanup and redevelopment funds.
In 2000	Although final data is not expected until April 2001, third quarter data shows that the goal was exceeded. Third quarter results show cumulative totals of 2,024 site assessments, generation of 7,446 jobs and leveraging of $2.8 billion in cleanup and redevelopment funds.
In 1999	EPA exceeded its goal and reached 307 communities by the end of FY 1999.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Cumulative leveraging of cleanup and redevelopment funds.		not available	$3.7 B		$5.0 B	funds leveraged

Cumulative jobs generated.		not available	17,307	21,300	jobs generated
Cumulative site assessments.		not available	2,594	3,350	assessments
Cooperative agreements to support Brownfields assessment pilots.	80				agreements

Baseline: By the third quarter of FY 2000, EPA assessed 2,024 sites, generated 7,446 jobs, and leveraged $2.8 billion in cleanup and redevelopment funds.

Brownfield Community Support

In 2003 EPA will provide funding for 30 communities to capitalize revolving loan funds for a cumulative total of 182, provide funding for 10 job training pilots for a cumulative total of 66 and 70% of graduates placed in jobs, and support 28 existing Showcase Communities.

In 2001 46 communities capitalized 23 new and append 2 existing revolving loan funds. EPA awarded 12 additional showcase community designations, supporting a total of 28 showcase communities. Additionally, EPA awarded 9 new job training pilots.

In 2000 EPA met its goal, benefitting a total of 61 communities through 37 agreements to capitalize revolving loan funds. Additionally, EPA was successful in supporting 16 showcase communities and 16 job training pilots.

In 1999 EPA met its target by supporting 16 existing showcase communities, and provided funding for 68 communities to capitalize brownfields cleanup revolving loan funds resulting in the award of 45 cooperative agreements.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Showcase communities.	16	16	28			communities
Communities served by cooperative agreements to capitalize revolving loan funds.	45	37	46			agreements
Job training pilots.		16	9			pilots
Cumulative communities served by cooperative agreements to capitalize revolving loan funds.					182	communities
Cumulative job training pilots.					66	pilots
Cumulative showcase communities.					28	communities
Percentage of trainees placed.					70	percent

Baseline: By the end of 2000, EPA signed 104 agreements for capitalization of revolving loan funds, awarded 37 job training pilots, and provided continued support to 16 showcase communities.

Superfund Intermediate Cleanup Indicators

In 2003 EPA will increase the number of Superfund hazardous waste sites with human exposures and migration of contaminated groundwater under control.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Superfund hazardous waste sites with human exposures controlled.					10	sites
Superfund hazardous waste sites with groundwater migration controlled.					10	sites

Baseline: In FY 2001, EPA established a preliminary baseline of 1450 final and deleted NPL sites to monitor for human exposures under control. 1126 (78%) of these 1450 sites have human exposures under control. In FY 2001, EPA established a preliminary baseline of 1204 final and deleted NPL sites to monitor for migration of contaminated groundwater under control. 745 (61%) of these 1204 sites have contaminated groundwater migration under control.

Tribal Cleanup Assistance

In 2003 Complete 45 Leaking Underground Storage Tank (LUST) cleanups in Indian Country for a cumulative total of 617 cleanups since 1987.

In 2003 EPA will continue to emphasize increasing the number of Indian tribes participating in the Superfund program, as expressed through the number of tribes supported by Superfund cooperative agreements with tribes and intertribal consortia.

In 2001 30 LUST cleanups were completed in Indian Country in FY 2001.

In 2001 FY 2001 accomplishments in Indian Country include 11 site assessments, support to 78 tribes through 27 cooperative agreements, provision of $3.8M for capacity building, and tribal leadership or support in responding to 26% of Superfund sites impacting Indian Country.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
LUST cleanups in Indian Country.			30		45	cleanups
Site assessments (PA/SI) conducted in Indian country.			11		no target	assements
The number of tribes supported by cooperative agreements with tribes/intertribal consortia.			78		no target	agreements
Funding provided for building tribal capacity.			$3.8M		no target	funding

Percentage of Superfund sites impacting Indian country where a tribe is involved as either the lead or support agency.			26		no target	involvement

Baseline: EPA completed a total of 532 LUST cleanups in Indian Country from 1987 through 2001. The baseline for Superfund activities is currently under development.

Homeland Security

In 2003 EPA will complete the remaining 27 critical facility vulnerability assessments, priortize the risks associated with each facility, and begin mitigation.

In 2003 EPA will improve its overall homeland security readiness capability by 20% by performing enhanced training and exercises and providing state-of-the-art equipment. Percentage improvement will be determined by an annual readiness survey and inspections.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Percentage improvement in homeland security readiness.					20	percent
Percentage of LEPCs that have incorporated homeland security prevention and planning into community contingency plans.					no target	percent
Percentage of states that have incorporated homeland security planning into state response systems.					no target	percent

Baseline: Based on FY 2002 performance, baseline is zero for number of critical Agency facilities that have had vulnerability assessments.

Homeland Security

In 2003 EPA will complete the remaining 27 critical facility vulnerability assessments, priortize the risks associated with each facility, and begin mitigation.

In 2003 EPA will improve its overall homeland security readiness capability by 20% by performing enhanced training and exercises and providing state-of-the-art equipment. Percentage improvement will be determined by an annual readiness survey and inspections.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of vulnerability assessments performed.					27	Assessments

Baseline: Based on FY 2002 performance, baseline is zero for number of critical Agency facilities that have had vulnerability assessments.

Research

Scientifically Defensible Decisions for Site Clean

In 2003	To ensure cost-effective and technically sound site clean-up, deliver state-of-the-art guidance and methods to EPA and stakeholders for risk management of fuel oxygenates; organic and inorganic contamination of sediments, ground water and/or soils; and oil spills.
In 2001	EPA provided technical information to support scientifically defensible and cost-effective decisions for clean-up of complex sites, hard-to-treat wastes, mining, oil spills near shorelines, and Brownfields to reduce risk to human health and the environment.
In 2000	The MTBE case studies summary report was delayed to include more than the original four sites. The SITE report was sent to OMB in FY 2000, but the time required for approval delayed its arrival in Congress. The dermal exposure route report was delayed until 12/00 to allow for completing peer review.
In 1999	Completed: 1) Statistical Distribution for Selected Exposure Factors; 2) report and software on modeling of bioavailability of cadmium at haz. waste sites; 3) issue paper on pesticide degradation in haz. waste sites; 4) report on software and database for pilot project to enhance MIXTOX database.
In 1999	Produced the annual Superfund Innovative Technology and Evaluation (SITE) Program report, and completed six (6) innovative technology reports.
In 1999	Produced: 1) manual of practice for the Horizontal Lasagna Process; 2) research data from bench-scale studies of leachate application to liner materials; and 3) final cover guidance revision on an EPA report entitled, "Alternative Cover Assessment Project Phase I Report."

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Envronnmental Research Brief on permeable reactive barrier of ground water contaminated with chromium and chlorinated solvents	1 report					
Using data from the Exposure Factors Handbook, develop peer-reviewed statistical distributions for selected exposure factors.	30-SEP-1999					
Interim report on monitored natural attenuation in sediments			1			document
Summary Report of Case Studies of Natural Attenuation of MTBE, a fuel additive, at Geographically Diverse Locations		0				report
Progress report on Field Demonstration of Chemically-Enhanced Subsurface Dense, Non-Aqueous Phase Liquid Extraction Technologies			1			report
Superfund Innovative Technology Evaluation (SITE) Program Report to Congress.		18-Jan-2001				report

A report summarizing the key research findings methods, models, and factors relating to evaluating the risks from the dermal route of exposure.		31-Dec-2000			report
Review the 20 most common Superfund soil contaminants and develop eco-toxicity soil screening levels for wildlife and soil biota for chemicals where there is sufficient data.		30-Sep-2000			values
Delivery of the Annual SITE Program Report to Congress	30-Nov-1999				
Publish a technical Resource Document on the bioremediation of oil spills on marine shorelines. Provide oil spill response teams with a tool to assess appropriate applications of bioremediation.			1		document
Deliver the Annual SITE Program Report to Congress.			0		report
Annual SITE Program report to Congress detailing 4-6 innovative approaches, their cost savings and future direction; reports summarizing pilot scale evaluation of in-situ remedies for solvents.				1	report
Report: Permeable reactive barriers for ground water remediation; Incorporating the results of long-term performance studies in remedy selection for contaminated sites.				1	report

Baseline: Deliver state-of-the -art guidance and methods to EPA and other stakeholders for risk management of fuel oxygenates; organic and inorganic contamination of sediments, ground water and/or soils; and oil spills to ensure cost-effective and technically sound site clean-up. Baseline: There are a number of contaminants and/or media at Superfund, Leaking Underground Storage Tank (LUST) sites that are difficult to clean up. Methyl tert-Butyl Ether (MTBE), a fuel oxygenate found increasingly in US ground water/drinking water, requires clean up to low (ppb) levels but clean-up is expensive because of its chemical, physical and biological properties. Polynuclear aromatic hydrocarbons (PAH) are found at wood preserver sites and gas manufacturing plants, contain carcinogenic components and are difficult to cost-effectively clean up due to their high molecular weight. Arsenic (As) in ground water requires clean up to low levels due to its impacts on humans and ecological systems. As treatment systems which perform for long periods of time are needed. We also need to understand the reasons why ground water As concentrations may naturally reduce over time. Bulk shipment/storage of non-petroleum oils (e.g. vegetable oils) can result in spills/leaks that have significant impacts on fresh water and marine environments. Inexpensive techniques are needed to clean up these spills without doing further harm to the environment. Research involving pilot and full scale treatment testing/demonstrations is particularly important when addressing these research needs because such research will lead to near-term options for effective, reasonable-cost clean-ups.

OBJECTIVE 02: REGULATE FACILITIES TO PREVENT RELEASES

By 2005, EPA and its federal, state, tribal, and local partners will ensure that more than 277,000 facilities are managed according to the practices that prevent releases to the environment.

UST Compliance

In 2003 EPA and its state and tribal partners will ensure that 80% of UST facilities will be in significant operational compliance with leak detection requirements, and 85% of UST facilities will be in significant operational compliance with spill, overfill and corrosion protection regulations.

In 2001 The Agency now tracks the number of UST facilities in significant operational compliance with requirements, as opposed to the number of UST systems equipped to meet the requirements. For this reason, data on these two measures is not available and will not be available in the future.

In 2000 Goal not met. 86% of USTs demonstrated compliance with the 1998 requirements to upgrade, close or replace substandard tanks. The original goal was based on equipment changes to UST systems. However, the 86% percent reflects operational compliance as well as equipment changes.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Percentage of USTs in compliance with the 1998 deadline requirements.		86%	not available			compliance
Percentage of USTs in compliance with the leak detection requirements.			not available			compliance
Percentage of UST facilities in significant operational compliance with leak detection requirements.					80	percent
Percentage of UST facilities in significant operational compliance with spill, overfill and corrosion protection regulations.					85	percent

Baseline: EPA has worked with stakeholders to develop new measures that will account for significant operational compliance. Data are being collected in FY 2001 and a new baseline should be available in FY 2002.

Emergency Planning

In 2003 300 audits will be completed on RMP plans to determine completeness and accuracy, and 8 additional states (for a cumulative total of 25) will be implementing accident prevention programs.

In 2001 EPA met its goal, with 85% of facilities submitting RMPs, 5 additional states implementing Accident Prevention Programs, and 438 audits completed to determine RMP completeness and accuracy.

In 2000 EPA met its goal by documenting compliance with RMP requirements at 75% of the covered facilities, facilitating 3 additional states in implementation of the RMP program and conducting 266 RMP facility audits.

In 1999 In FY99, the electronic system for collecting and establishing baseline data on RMP facilities was completed. The total number of facilities which have submitted RMPs is 14,405. Additionally, 2 States are implementing a prevention program.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Percentage of facilities which have submitted RMPs.		75%	85			facilities
RMP audits completed.		266	438		300	audits
Number of states implementing accident prevention programs.	2	3	5		8	states
Number of LEPCs implementing the Clean Air Act 112 (r) chemical RMP- prevention programs	not available					LEPCs

Baseline: By FY 2000, 75% of facilities were compliant with RMP requirements and 10 states were implementing accident prevention programs.

Oil Spill Prevention Compliance

In 2003 600 additional facilities will be in compliance with the Spill Prevention, Control and Countermeasure (SPCC) provisions of the oil pollution prevention regulations, for a cumulative total of 3,495 facilities since 1997.

In 2001 EPA confirmed an additional 593 facilities in compliance with spill prevention, control, and countermeasures (SPCC) provisions, for a cumulative total of 2,345 facilities in compliance since 1997.

In 2000 EPA exceeded its goal, with an additional 678 facilities in compliance with spill prevention, control and countermeasure (SPCC) provisions of the oil pollution regulations, for a cumulative total of 1,752 facilities in compliance since 1997.

In 1999 EPA exceeded its goal by bringing 774 facilities into compliance with SPCC provisions.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Facilities in SPCC compliance.	774	678	593		600	facilities

Baseline: 1,752 facilities were in compliance in FY 2000.

Oil Spill Response

In 2003 Respond to or monitor 300 significant oil spills in the inland zone.

In 2001 EPA significantly exceeded its goal by responding to 249 oil spills and monitoring 278 oil spills.

In 2000 EPA exceeded its goal by responding to 176 oil spills and monitoring response at 192 oil spills.

In 1999 EPA exceeded its goal by responding to 94 oil spills and monitoring response at 229 oil spills.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Oil spills responded to by EPA.	94	176	249			spills
Oil spills monitored by EPA.	229	192	278			spills
Oil spills responded to or monitored by EPA.					300	spills

Baseline: EPA typically responds to 70 oil spills and monitors 130 oil spill cleanups per year.

Ensure WIPP Safety

In 2003 Certify that 8,000 55 gallon drums of radioactive waste (containing approximately 24,000 curies) shipped by DOE to the Waste Isolation Pilot Plant are permanently disposed of safely and according to EPA standards.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of 55-Gallon Drums of Radioactive Waste Disposed of According to EPA Standards					8,000	Drums

Baseline: The Waste Isolation Pilot Plant (WIPP) near Carlsbad, NM was opened in May 1999 to accept radioactive transuranic waste. By the end of FY 2002, approximately 13,000 (cumulative) 55 gallon drums will be safely disposed. In FY 2003, EPA expects that DOE will ship an additional 8,000 55 gallon drums of waste to WIPP so that 2.4% of the planned waste volume, based on disposal of 860,000 drums over the next 40 years, is permanently disposed of safely and according to EPA standards. Number of drums shipped to the WIPP facility on an annual basis is dependent on DOE priorities and funding. EPA volume estimates are based on projecting the average shipment volumes over 40 years with an initial start up.

RCRA Facility Standards and Compliance

In 2003 77.2% of the hazardous waste management facilities will have approved controls in place to prevent dangerous releases to air, soil, and groundwater. This represents an additional 39 facilities meeting the goal this year.

In 2001 An additional 249 hazardous waste management facilities have permits or other approved controls in place, for a cumulative total of 2,051 or 74% of the facility universe. The streamlined permitting standards rule was proposed October 12, 2001.

In 2000 EPA exceeded its goal by establishing approved controls for 308 additional RCRA hazardous waste management facilities, for a cumulative total of 1,802 facilities or 62% of the 2,900 facility baseline.

In 1999 149 RCRA hazardous waste management facilities were determined to have permits or other controls in place.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
RCRA hazardous waste management facilities with permits or other approved controls in place.	149					facilities
Propose final streamlined permitting standards		0	1			rulemaking
Percent RCRA hazardous waste management facilities with permits or other approved controls in place.		62%	74%		77.2	percent
Initiate training program for new permitting standards.					1	training

Baseline: EPA established a baseline of approximately 2,750 facilities in October 2000.

Tribal Prevention Assistance

In 2003 EPA will provide grants to those tribes identified as having facilities subject to the Emergency Planning and Community Right-to-know Act (EPCRA).

In 2003 EPA will evaluate RCRA Subtitle C management needs for an additional 36 Federally recognized tribes.

In 2003 EPA will facilitate closing or upgrading existing high-threat open dumps on Indian Lands.

In 2001 Data is currently unavailable for the open dumps cleanup project.

In 2001 EPA developed a tribal strategy to promote development of tribal chemical emergency preparedness programs.

In 2001 EPA evaluated the needs of 177 tribes in FY 2001.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Provide funding assistance.					no target	grants
Development of draft strategy.			1			draft strategy
Tribes evaluated.			177		36	evaluations
Open dumps assessed.			not available		no target	assessments
Open dumps upgraded to comply with Subtitle D landfill standards.			not available		no target	upgrades
Open dumps with contents transferred and protections against future dumping in place.			not available		no target	sites
Provide support and funding to tribes participating in the multi-Agency Tribal Open Dump Cleanup Project.					no target	funding

Baseline: EPA is currently working to assess the number of tribes with chemical hazards on tribal lands.

Research

Scientifically Defensible Decisions for Active Man

In 2003 Deliver scientifically-enhanced 3MRA to OSW for their HWIR proposal and provide OSW/Regions with site-specific version of this exposure and risk assessment modeling system to implement HWIR and other applications for more cost-effective waste site management and protection of health and environment.

In 2001 EPA provided technical information to support RCRA regulatory development for waste identification, containment, and combustion.

In 2000 EPA provided targeted research and technical support for the active management of wastes by preparing nine provisional toxicity values from 38 feasibility assessments on 25 waste constituents. In addition, EPA published the journal article on factors that control Hg speciation in incinerators.

In 1999 Completed a report on the software modeling system for automating the Hazardous Waste Identification Rule (HWIR) assessment and completed a Beta-II version of this system.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
HWIR Human and Ecosystems Site (Generic) Exposure-Risk Assessment Screening Model, peer reviewed and applied to HWIR listed chemical exit levels	30-SEP-1999					
Beta version for comprehensive modeling system.	1					system

Develop provisional toxicity values for 10 - 20 waste constituents that do not have values describing their dose-response toxicological properties.	30-Sep-2000			values
Provide journal article on factors that control Hg speciation in incinerators	1			article
Update the HWIR99 modeling methodology for delisting hazardous wastes, in response to public comments on 1999 Federal Register Notice		1		update
Deliver science based enhancements to the 3MRA modeling system to support OSW's proposed HWIR and for conducting site-specific risk assessments.			1	model

Baseline: As a result of their regulatory reform efforts, OSW introduced in November 1999, a new open-architecture, multimedia, multipathway, and multi-receptor exposure and risk assessment (3MRA) methodology designed to support their Hazardous Waste Identification Rule (HWIR). Independent software testing, peer review on the system architecture and its internal science modules, and public comments on the Federal Register announcement are being addressed through refinements to the proposed modeling system. We also are improving some of the existing physical, chemical, and biological processes algorithms in the current system. The enhanced version will be used to support OSWs proposed HWIR (Proposal and Final Rule are expected about FY03 and FY05, respectively) which will update existing waste disposal regulations to eliminate possible over-regulation; 3MRA will serve as the scientific basis for establishing safe exit levels for certain wastes. The site-specific version will expand the screening level assessment capabilities to provide for site-specific exposure and risk assessments that will be used in HWIR implementation and other RCRA applications.

GOAL 06: REDUCTION OF GLOBAL AND CROSS-BORDER ENVIRONMENTAL RISKS

The United States will lead other nations in successful, multilateral efforts to reduce significant risks to human health and ecosystems from climate change, stratospheric ozone depletion and other hazards of international concern.

OBJECTIVE 01: REDUCE TRANSBOUNDARY THREATS TO HUMAN AND ECOSYSTEM HEALTH IN NORTH AMERICA.

By 2005, reduce transboundary threats to human health and shared ecosystems in North America, including marine and Arctic environments, consistent with our bilateral and multilateral treaty obligations in these areas, as well as our trust responsibility to tribes.

U.S. - Mexico Border Water/Wastwater Infrastructur

In 2003	Increase the number of residents in the Mexico border area who are protected from health risks, beach pollution and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service.
In 2001	Provided protection to over 576,405 residents in the Mexico border area from health risks, beach pollution and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service.
In 2000	10 Additional water/wastewater projects (cumulative total of 36) along the Mexican border have been certified for design-construction.
In 1999	9 additional water/wastewater projects along the U.S.-Mexico Border have been certified for design-construction.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of additional people in Mexico border area protected from health risks, because of adequate water & wastewater sanitation systems funded through Border Environmental Infrastructure Fund.			576,405		900,000	People
Projects certified for design-construction along the Mexican Border	9	10				Projects

Baseline: There are approximately 11 million residents in the border area.

Great Lakes: Binational Toxics Strategy

In 2003	Reduce Great Lakes toxic pollutants.
In 2001	Reduced Great Lakes toxic pollutants by remediating over 400,000 cubic yards of contaminated sediment..

In 2000 Five assessments and characterizations (1 new and 4 follow-up) were conducted in Great Lakes Areas of Concerns. Cataloged and publicized 8 actions toward reduction challenges under the BNS. Imnplemented 4 Great Lakes projects of Level I substances in support of toxics reductions.

In 1999 Cataloged and publicized 3 actions toward reduction challenges under the BNS. Initiated 12 Great Lakes Projects in support of toxics reduction.

In 1999 Seven assessments and characterizations (2 new and 5 follow-up) were conducted in Great Lakes Areas of Concern. Two of the five sediment cleanup demostrations started in 1996 have been completed.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Level I substances for which 1-2 toxic reduction activities are being implemented.		4				Substances
New assessments and characterizations to support State/community clean-up of contaminated sediments at Great Lakes AOCs.		1				Assessment
Follow-up assessments and characterizations to support State/community clean-up of contaminated sediments at Great Lakes AOCs.		4				Assessments
Cubic yards of contaminated sediment remediated in the Great Lakes.			401,500		100,000	Cubic yards
Great Lakes sediment cleanup demonstrations completed		2				Demonstration
Catalog and publicize actions (partnerships or virtual elimination demonstration projects) toward reduction challenges under BNS.	3					Actions
Great Lakes Projects initiated in support of toxics reduction	12					Projects
Assessments and characterizations at Great Lakes Areas of Concern	7					Assessments
Catalogued and publicized actions (partnerships or virtual elimination demonstration projects) initiated toward reduction challenges under BNS.		8				Actions
Completion and documentation of BNS analytical process for each of the Level 1 chemicals. Process includes info. gathering, analysis of reg. gaps, recommendations, & options for reductions		100				% Completion
Cumulative total (out of 5 started since 1996) of sediment cleanup demonstrations completed.	2					Cleanup demos

Baseline: U.S. baselines for toxic pollutants are, in most cases, based on the most recent and appropriate inventory as of the Great Lakes Strategy's 1997 signing. In the case of mercury, for example, the most recent inventory is based on estimated emissions during the early 1990s. In September 1999, GLNPO quantified for the first time annual contaminated sediment remediation. GLNPO will continue to quantify contaminated sediment remediation annually.

Great Lakes: Ecosystem Assessment

In 2003 Great Lakes ecosystem components will improve, including progress on fish contaminants, beach toxics, air toxics, and trophic status.

In 2001 Great Lakes ecosystem components improved, including progress on fish contaminants, beach toxics, air toxics, and trophic status.

In 2000 6,000 of acres of acquatic, wetland, riverine, and terrestrial Great Lakes habitats were positively impacted.

In 1999 Funded 8 projects intended to ecologically enhance terrestrial biodiversity and have enhanced 95,000 acres.

In 1999 Protocols developed for swimmability index, benthic community health, sediment assessment, sediment remediation, and predator fish.

In 1999 Steps identified in ballast water management that will prevent the introduction of new non-indigenous species.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Great Lakes Ecosystem Indicator Indices with reports, addressing select fish contaminants, atmospheric deposition, limnology, biology, and sediments.		10				Indices
Acreage of total aquatic, wetland, riverine, and terrestrial Great Lakes habitat positively impacted.		6,000				Acres
Begin pilot project to implement 1 ballast water management recommendation addressing Great Lakes invasive species.		2				Pilot
Long-term concentration trends of toxics (PCBs) in Great Lakes top predator fish.			Uncertain		5%	Annual decrease
Long-term concentration trends of toxic chemicals in the air.			Declining		7%	Annual decrease
Total phosphorus concentrations (long-term) in the Lake Erie Central Basin.			Improving		10	Ug/l
Long-term dissolved oxygen depletion trend in Lake Erie.					3.11	Mg/l

Develop protocols for 5 of a proposed 12 GLNPO Monitoring Indexes, summarizing the prior year's data on select fish contaminants, atmospheric dep., limnology, biology, & sediments.	5		Protocols
Projects and acreage ecologically enhanced in terrestrial biodiversity investment areas	8/95,000		Projects/Acres
Model predictions for Lake Michigan for toxics reduction scenarios.		5	Predictions
Set of quantifiable targets for ecological enhancement in aquatic biodiversity investment areas.	0		Set
Identify steps in ballast water management that will prevent the introduction on new non-indigenous species.	1		Set

Baseline: Identified targets are currently based on historic trends. The trend (starting with 1972 data) for PCBs in Great Lakes top predator fish toxics is expected to be less than 2 parts per million (the FDA action level), but far above the Great Lakes Initiative target or levels at which fish advisories can be removed. The trend (starting with 1992 data) for PCB concentrations in the air is expected to range from 50 to 250 picograms per cubic meter. The trend (starting with 1983 data) for phosphorus concentrations is expected to range from 4 to 10 parts per billion, levels established in the Great Lakes Water Quality Agreement. The 1970 baseline of oxygen depletion of the Lake Erie central basin is 3.8 mg/liter/month. EPA is working with its partners to refine targets within the next 3 years.

Mexico Border Outreach

In 2003 Develop air quality assessments and improvement programs to attain air quality standards in border communities.

In 2003 Expand hazardous waste management and pollution prevention practices in the maquiladoras.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
U.S. cities along the Mexico Border region carrying out air emissions inventories.					1	cities
Number of maquiladoras that have implemented pollution prevention controls after a site assessment visit, workshop, or training session.					314	maquiladoras

Baseline: Many border area residents are exposed to health-threatening levels of air pollutants including ozone, particulate matter, carbon monoxide and sulfur dioxide. The need to evaluate levels of targeted air pollutants is particularly urgent in heavily populated urban areas where air quality problems are

compounded by emissions from increasing numbers of vehicles - many of which are older and poorly maintained; extensive industrial activity; and numerous air sources (e.g., unpaved roads, waste disposal fires). To date seven out of the 14 sister-city pairs have air quality networks established and operating.

OBJECTIVE 02: REDUCE GREENHOUSE GAS EMISSIONS.

By 2010, U.S. greenhouse gas emissions will be substantially reduced through programs and policies that also lead to reduced costs to consumers of energy and reduced emissions leading to cleaner air and water. In addition, EPA will carry out assessments and analyses and promote education to provide an understanding of the consequences of global change needed for decision making.

Reduce Greenhouse Gas Emissions

In 2003 Greenhouse gas emissions will be reduced from projected levels by approximately 73.5 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations thereby offsetting growth in greenhouse gas emissions above 1990 level by about 20%.

In 2001 The data for this annual performance goal will not be finalized until mid-2002.

In 2000 Greenhouse gas emissions were reduced from projected levels by more than 59.3 MMTCE per year through EPA partnerships with businesses, schools, State and local governments, and other organizations thereby offsetting growth in GHG emissions above 1990 level by about 20%.

In 1999 EPA reduced US greenhouse gas emissions by 46 million metric ton carbon equivalent (MMTCE) per year through partnerships with businesses, schools, state and local governments, and other organizations.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Annual Greenhouse Gas Reductions - All EPA Programs	46	59.3	On track		73.5	MMTCE
Greenhouse Gas Reductions from EPA's Buildings Sector Programs (ENERGY STAR)	12.7	15.2	On track		19.5	MMTCE
Greenhouse Gas Reductions from EPA's Industrial Efficiency/Waste Management Programs	4.5	5.5	Not on track		6.5	MMTCE
Greenhouse Gas Reductions from EPA's Industrial Methane Outreach Programs	8.5	13.8	On track		17.5	MMTCE
Greenhouse Gas Reductions from EPA's Industrial HFC/PFC Programs	15.0	21.4	On track		25.6	MMTCE
Greenhouse Gas Reductions from EPA's Transportation Programs	1.1	1.7	Not on track		2.4	MMTCE
Greenhouse Gas Reductions from EPA's State and Local Programs	1.6	1.7	Not on track		2.0	MMTCE

Baseline: The baseline for evaluating program performance is a forecast of U.S. greenhouse gas emissions in the absence of the Climate Change Action Plan programs. The baseline was developed as part of an interagency evaluation of the Climate Change Action Plan in 1997, which built on a similar baseline forecast that was developed in 1993 for the Climate Change Action Plan. The updated baseline includes energy forecasts and economic growth projections. The baseline is discussed at length in the Climate Action Report 1997, which includes a discussion of differences in baselines between the original Climate Change Action Plan and the 1997 baseline update. The baseline is currently under review as part of the interagency evaluation process for preparing the Climate Action Report 2001.

Reduce Energy Consumption

In 2003 Reduce energy consumption from projected levels by more than 95 billion kilowatt hours, contributing to over $11 billion in energy savings to consumers and businesses.

In 2001 The data for this annual performance goal will not be finalized until mid-2002.

In 2000 Reduced energy consumption from projected levels by about 74 billion kilowatt hours, resulting in over $8 billion in energy savings to consumers and businesses that participate in EPA's climate change programs.

In 1999 US energy consumption was reduced by 50 billion kilowatt hours per year, including annual energy bill savings to consumers and businesses of over $3 billion.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Annual Energy Savings - All EPA Programs	50	74	On track		95	Billion kWh

Baseline: The baseline for evaluating program performance is a forecast of U.S. greenhouse gas emissions in the absence of the Climate Change Action Plan programs. The baseline was developed as part of an interagency evaluation of the Climate Change Action Plan in 1997, which built on a similar baseline forecast that was developed in 1993 for the Climate Change Action Plan. The updated baseline includes energy forecasts and economic growth projections. The baseline is discussed at length in the Climate Action Report 1997, which includes a discussion of differences in baselines between the original Climate Change Action Plan and the 1997 baseline update. The baseline is currently under review as part of the interagency evaluation process for preparing the Climate Action Report 2001.

Clean Automotive Technology

In 2003 Transfer hybrid powertrain components, originally developed for passenger car applications, to meet size, performance, durability, and towing requiremnts of Sport Utility Vehicle and urban delivery vehicle applications with an average fuel economy improvement of 20% over the baseline.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Fuel Economy of EPA-Developed SUV Hybrid Vehicle over EPA Driving Cycles Tested					24.2	MPG

Baseline: The average fuel economy of all SUVs sold in the US in 2001 is 20.2 mpg. Values for 2001, 2002, and 2003 represent 10%, 15%, and 20% improvements over this baseline, respectively. The long-term target is to demonstrate a practical and affordable powertrain that is 30% more efficient by 2005, and 100% more efficient by 2010.

Research

Global Change Research - Human Health and Ecosyste

In 2003 Assess the potential effects of climate change on weather-related morbidity.

In 2003 Build the capacity to assess global change impacts on air quality by downscaling meteorological data to regional scales and quantifying the effects of advanced fuel/vehicle combinations.

In 2001 Assessed the consequences of global change (particularly climate change and climate variability) on human health and ecosystems.

In 2000 EPA assessed the consequences of global change and climate variability on human health by completing the products below and other research activities.

In 2000 Work to assess the impacts of global change on ecosystem services was delayed until FY02.

In 1999 A paper on problem formulation for ecosystem services sector assessments has been submitted to a peer-reviewed journal. A draft chapter that develops the "problem formulation" framework has been included in the Mid-Atlantic Regional Assessment. The climate change indicators report is delayed.

In 1999 Assessments linking regional hydrology to climate change were delayed until the 2nd quarter of FY 2001.

In 1999 The Mid-Atlantic and Great Lakes Regional Assessments were completed. These will contribute to the National Assessment of "Potential Consequences of Climate Change and Variability to the United States," required under the Global Change Research Act of 1990.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Assess potential effects of global change on ecosystem services.		30-Sep-2002				indicators
Complete a Health Sector Assessment of the potential consequences of climate change and variability for public health, for the USGCRP National Assessment process.		1				assessment

Provide preliminary results from a case study which will determine how climate change & variability affect the formation of trop. ozone in a city & consider the viability of certain adaptation options		N/A			results
Develop prototype ecological and health data and information system to integrate with the Global Climate Data and Information System (GCDIS).		1			info. system
Report on problem formulation for ecosystem services sector assessment.	1 report				
Report on the development and use of climate change indicators.					
Conduct preliminary assessment of regional scale consequences of climate change at three geographic locations (Mid-Atlantic, Gulf Coast, and upper Great Lakes).	2				assessment
Report on the potential effects of climate change on urban air quality.			0		report
Preliminary report assessing potential health effects of global change by linking human health and ecological risk.			1		report
Complete initial assessment of air quality impacts of several potential transportation sector technology paths as input to a study of global change on tropospheric ozone concentrations.			1		assessment
Produce a final, comprehensive assessment report which quantifies the potential effects of climate change on weather-related morbidity.				1	report
In support of the air quality assessments, produce interim assessment of how advancements in hydrogen/fuel cell and gasoline hybrid vehicles affect emissions of ozone precursors and PM.				1	assessment
Produce a preliminary analysis of meterological data and air quality using statistical methods.				1	analysis
Peer-reviewed reports for decision-makers and the public on the potential consequences of global change on 3 regions and on human health, which are the finished products of a multi-year effort.			3		reports

Baseline: In April 2000, the Health Sector Assessment Team participating in the first USGCRP National Assessment of the "Potential Consequences of Climate Variability and Change" published its Executive Summary. The entire assessment was published in May 2001 as a Special Issue of Environmental Health Perspectives. The Health Sector Assessment report identified key remaining research needs, which included weather-related morbidity effects. By the end of FY 2003, assessments will be completed of (1) heat-related morbidity in children; (2) the relationship between weather variability and violent crime; (3) the effects of inclement weather on accidents and injuries; and (4) the effects of extreme heat on emergency room visits and hospital admissions.

Air pollution continues to be a widespread public health and environmental problem in the United States. Previous studies suggest that global change (climate change and variability, UV-radiation, land use change) could have significant impacts on ambient air quality. Global climate change will likely result in changes in regional and local weather. While few studies have explicitly investigated the effects of global change on air quality, the available evidence (e.g., weather-ozone studies, basic atmospheric chemistry, sensitivity of emissions to weather and land use, etc.) raises concerns that global change could adversely affect air quality. Two pollutants likely to be affected by global change are ozone and particulate matter and they are also of significant interest to the Agency. By the end of FY 2003, two important components of an integrated air quality assessment will be completed: (1) downscaling of global meteorological data to geographic scales appropriate for air quality assessments; and (2) quantification of the air implications of advanced fuel/vehicle combinations likely to be used to adapt to climate change.

OBJECTIVE 03: REDUCE STRATOSPHERIC OZONE DEPLETION.

By 2005, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery. In addition, public education to promote behavior change will result in reduced risk to human health from ultraviolet (UV) overexposure, particularly among susceptible subpopulations such as children.

Restrict Domestic Consumption of Class II HCFCs

In 2003 Restrict domestic consumption of class II HCFCs below 9,960 ODP-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 10,000 ODP MTs.

In 2001 The 2001 results will be available after March 15, 2002.

In 2000 Domestic consumption of class II HCFCs was restricted below 15,240 ODP-weighted metric tonnes (ODP MTs) and domestic exempted production and import of newly produced class I CFCs and halons was restricted below 60,000 ODP MTs.

In 1999 Domestic consumption of class II HCFCs was restricted to below 208,400 MTs and domestic exempted production and import of newly produced class I CFCs and halons was restricted to below 130,000 MTs.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Domestic Consumption of Class II HCFCs	<208,400 MTs	13,180	On track		<9,960	ODP MTs

Domestic Exempted Production and Import of Newly Produced Class I CFC s and Halons	<130,000 MTs	462	On track	<10,000	ODP MTs

Baseline: The base of comparison for assessing progress on the 2003 annual performance goal is the domestic consumption cap of class II HCFCs as set by the Parties to the Montreal Protocol. Each Ozone Depleting Substance (ODS) is weighted based on the damage it does to the stratospheric ozone - this is its ozone-depletion potential (ODP). Beginning on January 1, 1996, the cap was set at the sum of 2.8 percent of the domestic ODP-weighted consumption of CFCs in 1989 plus the ODP-weighted level of HCFCs in 1989. Consumption equals production plus import minus export.

Montreal Protocol Fund

In 2003 Provide assistance to at least 60 developing countries to facilitate emissions reductions and toward achieving the requirements of the Montreal Protocol.

In 2001 The US provided assistance to 76 developing countries to facilitate emissions reductions toward achieving the requirements of the Montreal Protocol.

In 2000 Provided assistance to 50 developing countries to facilitate emissions reductions and toward achieving the requirements of the Montreal Protocol.

In 1999 Through our contribution to the Multilateral Fund, assistance was provided to 50 countries working toward achieving the Montreal Protocol.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Assistance to Countries Working under Montreal Protocol	50	50	76		60	Countries

Baseline: In an average year the Multilateral Fund, created through the Protocol, approves projects to assist over 50 developing countries in their efforts to comply with the phaseout of ODSs.

OBJECTIVE 04: PROTECT PUBLIC HEALTH AND ECOSYSTEMS FROM PBTS AND OTHER TOXICS.

By 2006, reduce the risks to ecosystems and human health, particularly in tribal and other subsistence-based communities, from persistent, bioaccumulative toxicants (PBTs) and other selected toxins which circulate in the environment on global and regional scales.

Eval. Domest. Suitab. of Internal Consens. Testing

In 2003 Evaluate the domestic suitability of international consensus testing decisions made in the OECD International Screening Information Data Set (SIDS) program and obtain needed testing as required.

In 2001 The shortfall in the number of chemicals in this relatively young, voluntary program is due to a lack of committments from Industry, as well as debate within member countries on which chemicals should be brought forward.

In 2000 A change in the Organization for Economic Cooperation and Development (OECD) program and a meeting delay caused the Screening Information Data Set (SIDS) end of year results to fall short. Delays in the 12th OECD Addendum publication caused a shortfall in guidelines harmonization.

In 1999 EPA is pursuing chemical testing through its domestic HPV Challenge program with industry and the OECD's collaborative Program on Screening Information Data Sets. EPA completed 36 SIDS reviews in FY 1999. The OECD guidelines are still under review by other OECD member countries.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Complete the review of testing needs for chemicals processed through the OECD- sponsored SIDS program	36	28	40		75	Test Reviews
Complete OECD harmonization	0	5	4			Test Guidelin
Prepare harmonization documents					5	Dft/Fnl Guidlns

Baseline: (1)Complete testing and data on 25 chemicals processed through the OECD sponsored SIDS program in 1998. (2) Guideline harmonization baseline is 82 test guidelines (health, ecosystem, exposure, physical and chemicals properties) and 32 in draft. (3)In addition to finalized guidelines: (a) Drafts of New Guidelines and Guidance documents sent out for member country review, (b) Drafts of revised Existing Guidelines and Guidance documents that have been sent out for member country review are included.

POPs Negotiation

In 2003 Reduce environmental exposure to US and selected Countries of concern from Persistent Organic Pollutants (POPs) through the implementation of the Stockholm Convention on POPs.

In 2001 Three priority activities were initiated in developing countries to implement the newly concluded global convention on Persistent Organic Pollutants.

In 2000 Successfully concluded international negotiations on a global convention on Persistent Organic Pollutants (POPs) reaching agreement on POPs selection criteria, technical assistance, and risk management commitments on specified POPs.

In 1999 A negotiated agreement has been reached for USG polices and international agreement was reached in June 1999 on criteria for selecting Persistent Organic Pollutants to be covered in a new global POPs treaty, and No agreement has been reached yet on capacity building.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Agreed USG policies on selection criteria for Persistent Organic Pollutants	yes					negotiations
Production of a final agreed convention text		yes				report

Agreement on selection criteria and methodology	yes				report
Number of POPs implementation activities supported.		3			activities
Develop baseline information on atmospheric transport of POP chemicals to sensitive US ecosystems.				1	station
Conduct source inventories in selected Asia-Pacific countries				4	inventories
50% of farmer-owned obsolete POP pesticide stockpiles are removed as a result of training, in priority countries and or regions in Central America.				5	training
Assist countries in the Carribean to address targeted PCB sources.				1	Mgmt. Plan

Baseline: With the signing of the global POPs convention in May 2001 EPA will work on domestic implementing legislation (e.g., a FIFRA amendment) and projects to support implementation by key developing countries (e.g., China). In FY2001 EPA worked with UNEP to identify regions (e.g., Sub-Saharan Africa, Central America, Southeast Asia) which would benefit from such support from EPA, and we have started projects on the basis of available funding. Whenever possible EPA will support projects which also promote compliance with the global Prior Informed Consent (PIC) regime and the international commitment to improve chemicals management capabilities, as set out in the Bahia Declaration from the Third Session of the Intergovernmental Forum on Chemical Safety in October 2000.

Lead Gasoline Phase-Out

In 2003 An additional two countries make national commitments to phase out the use of lead in gasoline.

In 2001 Target Met. Philippines and Vietnam have committed to lead phase-out. Also, EPA was an active player in achieving the "Declaration of Dakar," which is a statement by representatives of 25 Sub-Saharan African countries presenting a timeline for phasing lead additives out of gasoline.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of commitments to Pb phaseout			2		2	countries
Global reduction in Pb gasoline.			10		10	percent

Baseline: Fourteen countries have phased out the use of Pb gasoline. Twelve countries and the European Union are working on the phase out of Pb gasoline.

OBJECTIVE 05: INCREASE DOMESTIC AND INTERNATIONAL USE OF CLEANER AND MORE COST-EFFECTIVE TECHNOLOGIES.

Through 2005, integrate environmental protection with international trade and investment and increase the application of cleaner and more cost-effective environmental practices and technologies in the United States and abroad to ensure that a clean environment and a strong economy go hand-in-hand.

Enhance Institutional Capabilities

In 2003	Enhance environmental management and institutional capabilities in priority countries.
In 2001	Target Met. EPA conducted environmental institutional building and enhanced the abilities of the following countries to protect their environments and those of the gloabal common: El Salvador, Nicaragua, Honduras, Mexico, China, Thailand, Eygpt, Indonesia, Vietnam, & Philippines.
In 2000	Delivered 12 international training modules; implemented 6 tech assistance/technology dissemination projects; implemented 5 cooperative policy development projects; and disseminated information products on US environmental technologies and techniques to 3100 foreign customers.
In 1999	3 of the 4 program areas for enhancing global environmental management were met.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of training modules delivered	16	12				modules
Number of tech assistance or tech dissemination projects carried-out	6	6				projects
Number of cooperative policy developement projects implemented		5				projects
Number of info products disseminated to foreign customers	2500	3100				products
Number of capacity buliding activities scheduled for initiation in FY 2000 and beyond	2					report
Number of countries or localities (3) that have adopted new or strengthened environmental laws and policies			3			countries
Number of organizations (3) that have increased environmental planning, analysis, and enforcement capabilities			3			organizations
Number of organizations (3) that have increased capabilities to generate and analyze environmental data and other information			3			organizations
Number of organizations (3) that have increased public outreach and participation			4			organizations
Number of targeted sectors (3) that have adopted cleaner production practices			2			industry sector
Number of cities (3) that have reduced mobile-source based ambient air pollution concentrations			3			cities
Assist in the development or implementation of improved environmental laws or regulations in priority countries.					1	countries
Increase the transfer of environmental best practices among the U.S. and its partner countries and build the capacity of developing countries to collect, analyze, or disseminate environmental data.					3	countries
Increase the capacity of programs in Africa or Latin America to address safe drinking water quality issues.					1	countries

Baseline: EPA has assisted several entities within developing countries to implement improved environmental laws, employ best enviromental practices, adopt cleaner production practices and reduce ambient air pollution concentrations.

World Trade Organization - Regulatory System

In 2003 All trade agreements negotiated after 2001 contain environmental provisions.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Trade agreements and world trade organization provisions contain environmental text					1	Agreements

Baseline: Currently, the World Trade Organization has no formal policy for involving the public in its decision making and dispute resolution processes.

GOAL 07: QUALITY ENVIRONMENTAL INFORMATION

The public and decision makers at all levels will have access to information about environmental conditions and human health to inform decision making and help assess the general environmental health of communities. The public will also have access to educational services and information services and tools that provide for the reliable and secure exchange of quality environmental information.

OBJECTIVE 01: INCREASE AVAILABILITY OF QUALITY HEALTH AND ENVIRONMENTAL INFORMATION.

Through 2006, EPA will continue to increase the availability of quality health and environmental information through educational services, partnerships, and other methods designed to meet EPA's major data needs, make data sets more compatible, make reporting and exchange methods more efficient, and foster informed decision making.

Process and Disseminate TRI Information - OEI

In 2003 The public will have better information on toxic releases and wastes being managed in their communities. EPA will also work with the owners and operators of facilities to reduce the record-keeping and reporting burdens associated with submitting their TRI forms to EPA by 14%.

In 2001 120,000 chemical submissions and revisions processed; published annual summary of TRIS database in April 2001; and TRI Public Data Release published in April 2001.

In 2000 Processed all submitted facility chemical release reports, published annual summary of TRI data, provided improved information to the public about TRI chemicals, and maximized public access to TRI information.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
TRI Public Data Release		Published	Published			Published
Chemical submissions and revisions processed.		119,000	120,000			Forms
TRIS database complete and report issued		On Target	Published			Published
Data quality: keep data entry error rate below 1% per form						Error Rate
Increase magnetic media use for TRI reporting						Magnetic Media
The number of forms containing Toxic Release Inventory data being reported electronically on computer diskettes will increase from 85% to 90%.					90	Percent

Baseline: In FY 2001, TRI electronic reporting will be 70%.

Enhanced Public Access

In 2003 Improve public access to compliance and enforcement documents and data through multimedia data integration projects and other studies, analyses and communication/outreach activities.

In 2001 EPA improved public assess to compliance but in areas covered by the performance measures EPA did not meet targets.

In 2000 EPA improved public access to compliance and enforcement documents and data, particularly to high risk communities, through multimedia data integration projects and other studies, analyses and communication/outreach activities.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Increase use of Sector Facilities Indexing Project website user sessions over FY99 levels		2				percent
Increase by 50% (over FY99 levels) the number of states with direct access to Integrated Data for enforcement Analysis (IDEA)		34				states
Percent of OECA policy and guidance documents available through the Internet		94				percent
By the end of FY 2001, all ten EPA Regions will have an enforcement and compliance web-site			9			Websites
Make 90% of enforcement and compliance policies and guidances issued this FY available on the Internet within 30 days of issuance			86		90	Percent
By April 2001, make summaries of all significant cases available on the Internet			50			Percent

Baseline: OECA enhances public access to compliance and enforcement documents through our efforts to make available through the internet newly issued enforcement and compliance documents.

Information Exchange Network

In 2003 Decision makers have access to the environmental data that EPA collects and manages to make sound environmental decisions while minimizing the reporting burden on data providers.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003

The number of states using the Central Data Exchange will increase to 45 as the means by which they submit data.	45	States
Implement four data standards in 13 major systems and develop four additional standards in 2003.	4	Data Standards

Baseline: The FY 2001 baseline for this program is zero as it is a new program.

OBJECTIVE 02: PROVIDE ACCESS TO TOOLS FOR USING ENVIRONMENTAL INFORMATION.

By 2006, EPA will provide access to new analytical or interpretive tools beyond 2000 levels so that the public can more easily and accurately use and interpret environmental information.

Index Watershed Indicators

In 1999 Index of Watershed Indicators has been updated. EPA released two new versions of IWI which include updates of six indicators and three new measures. To enhance the utility of the IWI, EPA also developed an IWI data index, a catalog of maps (Watershed Atlas) and new combinations of data layers.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Updated IWI system, adding data layers and data inputs.	1					System

Baseline:

Improved Access to Information on Pesticides

In 1999 The Agency focused on educating workers and health care providers and continued development of the pesticide environmental stewardship program. EPA established the Pesticide Safety Website and distributed the "Pesticides and Food" brochure to grocery stores nationwide.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Annual consumer brochure on the health effects of pesticides	1					Brochure

Baseline:

Improve EPA's Internet Site

In 1999 EPA improved the quality, effectiveness and efficiency of EPA's Internet site by increassing the number of Website hits by 42%, increasing the number of Internet site pages available by 41.4% and increasing the number of distinct hosts accessing the Website by 25.3%.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Percentage of website hits.	42					Percent
Percentage of internet site pages available.	41.4					Percent
Percentage of distinct hosts accessing the Website.	25.3					Percent

Baseline:

Environmental Justice

In 2003 Ensure that EPA's policies, programs and activities address disproportionately exposed and under-represented population issues so that no segment suffers disproportionately from adverse health and environmental effects.

In 2001 While EPA did meet the measuresaboutt he public meetings and responding to requests during NEJAC meetings, EPA did not meet the other targets.

In 2000 As a result of public meetings held, no new "hot spots" were identified.

In 2000 Through efforts such as the distribution of grants and holding community meetings, EPA worked to ensure that the Agency's policies, programs, and activities address minority and low income issues so no segment of the population suffers disproportionately from adverse environmental effects.

In 1999 EPA actively promoted environmental justice issues by holding 16 NEJAC meetings (exceeding the target of 10) and by providing environmental justice grants to 100 communities.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Award grants to low income and minority communities for addressing environmental problems.	100					Grants
NEJAC Meetings	16					Meetings
Hold 25 EPA-sponsored public meetings held where disproportionately impacted and disadvantaged communities participate		31	25			meetings
Respond within 60 days to 75% of requests made to each Region and National Program Manager to address complaints heard during public comment period at NEJAC		75	75			percent

Conduct 18 National Environmental Justice Advisory Commitee (NEJAC) meetings and focused roundtables in local communities where problems have been identified.	18	13				meetings
Hold one NEJAC public meeting annually where one environmental policy which impacts disadvantaged communities is discussed and the communities actively participate.					1	Meeting
Continue to engage the agencies in national issues of environmental concerns through the collaborative efforts of the IWG through the publication "Action Agenda for Environmental Justice".					1	Agenda
Award grants to organizations which address environmental problems in communities disproportionately impacted by environmental hazards.					90	grants

Baseline: The Agency works to address issues affecting disproportionately exposed and under-represented populations from adverse health or environmental effects. EPA identifies problem areas through: public comments received during the National Environmental Justice Advisory Committee (NEJAC) meetings; reviewing Environmental Impact Statements (EIS) filed under the National Environmental Policy Act (NEPA) in which environmental justice (EJ) indicators occur; concern from communities about new or renewals of permits under RCRA, CWA, CAA, etc.; and complaints filed under Title VI of the Civil Rights Act. EPA also works to address these issues through the Federal Interagency Working Group on Environmental Justice and by awarding grants to communities for addressing environmental problems.

Data Quality

In 2003 The public will have access to a wide range of Federal, state, and local information about local enviromental conditions and features in an area of their choice.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Window-to-My Environment is fully operational and serving citizens across the country with Federal, state, and local environmental information specific to an area of their choice.					Fully	Operational
Percent compliance with 13 criteria used by OMB to assess Agency security programs reported annually to OMB under the Government Information Security Regulatory Act.					75	Percent

Baseline: In FY 2001, 90% of the publically available facility data from EPA's national systems accessible on the EPA Website will be part of the Integrated Error Correction Process.

Research

Environmental Science Information

In 2003 Deliver assessments of effects of exposure to chemicals on human health and the environment to EPA, other governmental organizations, industry, consultants, academics, and nongovernmental organizations to promote scientifically sound, consistent risk assessments to enhance protection of human health

In 2001 EPA collected, managed, and presented environmental information for the benefit of the Agency and the public in order to enhance the availability and utility of data, information, and tools for decision-making.

In 2000 Five of the 12 planned Agency-wide human health assessments were completed. Several assessments were not completed due to the necessity to resolve scientific issues and respond to peer review comments.

In 1999 Eight (8) pilot projects were completed in FY 1999 under the EMPACT program. These projects implemented timely and high quality environmental monitoring technologies in EMPACT cities.

In 1999 Two IRIS summary documents were completed. Delays in completing other IRIS summaries are due mainly to science issues inherent to completing the assessments.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Add or update to IRIS 15 summaries of the potential adverse health effects of specific chemical substances.	2 Summaries					
Develop Agency consensus human health assessments (new and updated assessments) of 12 environmental substances of high priority to EPA and make them publicly available on IRIS.		5				assessments
Award 5-7 grants to EMPACT cities to implement timely and high quality environmental monitoring technologies.	8					Grants
Develop new and/or update Agency consensus human health assessments of 15 environmental substances of high priority to EPA and make them publicly available on IRIS.			7			assessments

Develop a priority list of existing data, information, and tools to provide assistance to EPA laboratories in the initial development of their inventories, to be made publicly available through EIMS.	1		list
Develop Agency consensus for human health assessments (new/updated) for 8-10 environmental substances of high priority to EPA, and make these accessible on the EPA IRIS Internet site.		8-10	assessments

Baseline: The Integrated Risk Information System (IRIS) is an electronic data base containing information on human health effects that may result from exposure to various chemicals in the environment for use in risk assessments, decision-making, and regulatory activities. Through the IRIS Program, ORD administers an Agency-wide process of chemical nomination, assessment, consensus building, and peer review through which assessments on IRIS are produced and updated. As of December 2000 , IRIS contained entries for 541 compounds. The IRIS program is continuously producing new assessments and updating existing IRIS assessments as new information becomes available. The information in IRIS is intended for those without extensive training in toxicology, but with some knowledge of health sciences. The individual chemical files in IRIS contain descriptive and quantitative information in the following categories: oral reference doses and inhalation reference concentrations (RfDs and RfCs, respectively) for chronic noncarcinogenic health effects; hazard identification, oral slope factors, and oral and inhalation unit risks for carcinogenic effects.

OBJECTIVE 03: IMPROVE AGENCY INFORMATION INFRASTRUCTURE AND SECURITY

Through 2006, EPA will continue to improve the reliability, capability, and security of EPA's information infrastructure.

Information Security

In 2003 OMB reports that all EPA information systems meet/exceed established standards for security.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Percent compliance with 13 criteria used by OMB to assess Agency security programs reported annually to OMB under the Government Information Security Regulatory Act.					75	Percent
Percent of intrusion detection monitoring sensors installed and operational.					75	Percent

Baseline: In FY 2001, OEI will complete four risk assessments. The breakout is as follows: Critical Infrastructure Systems is one, Mission Critical Systems are two, and Critical Financial Systems is one.

GOAL 08: SOUND SCIENCE, IMPROVED UNDERSTANDING OF ENV. RISK AND GREATER INNOVATION TO ADDRESS ENV. PROBLEMS

EPA will develop and apply the best available science for addressing current and future environmental hazards as well as new approaches toward improving environmental protection.

OBJECTIVE 01: CONDUCT RESEARCH FOR ECOSYSTEM ASSESSMENT AND RESTORATION.

Provide the scientific understanding to measure, model, maintain, and/or restore, at multiple spatial scales, the present and future integrity of highly valued ecosystems.

Research

Estuarine Ecosystem Conditions

In 2003	Provide the public with a reliable and statistically valid baseline for the condition of the Nation's estuaries against which to measure the success of ecosystem protection and risk management practices.
In 2001	Baseline conditions in the ecological condition of the Nation's estuaries have been established from which changes and ultimately trends can be evaluated at regional scales.
In 2000	EPA developed monitoring designs for National coastal monitoring by completing the products below and other research activities.
In 2000	EPA developed monitoring designs, including indicators, for streams in western watersheds by completing the products below and other research activities.
In 2000	EPA reported on monitoring findings in the Mid-Atlantic Region as a cost-effective means of measuring the condition of these systems by completing the products below and other research activities.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
A final report on the extent and magnitude of fish tissue contamination in small, wadeable streams in the Mid-Atlantic Region as means of identifying high risk areas.		1				final report
Draft design for a National coastal monitoring program to assess the biological condition of estuaries		1				draft design

Final report on the relationship between macroinvertebrate & periphyton assemblages & chemical & physical stressors to verify the applicability of these biological indicators in the Mid-Atlantic.	1		report
Refined coastal health indicators developed and applied in salt marsh estuaries and near coastal water of the Gulf and South Atlantic.	28-Feb-2001		indicators
Develop a final work plan for western stream condition monitoring.	30-Sep-2000		
Report describing the condition of the Nation's Estuaries.	1		report
Report on the condition of Nation's estuaries based on a statistically valid sampling design so that data is comparable across the Nation.		1	report

Baseline: The coastal monitoring strategy responds to the needs of EPA and the coastal states and tribes for information on the health of the coastal environment that will inform decisions to protect these vital coastal resources. For the past decade, ORDs Environmental Monitoring and Assessment Program (EMAP) has been working with federal, state, and academic scientists to develop the most cost-effective methods for measuring the physical, chemical, biological, and ecological conditions of coastal waters, bays, estuaries, beaches, and coastal wetlands. The data from this decade of EMAP research and field surveys in select areas of the country were combined with select data from EPA (ORD and OW), NOAA, Department of Interior, and Department of Agriculture to form an assessment of estuarine condition in 2001. Because of the need to determine current environmental health baselines and quantitatively measure improvement for GPRA, EPA developed an initiative that would implement the proven science developed by EMAP for the ecosystems found throughout the US coastal waters. Starting in 2000, survey information has been collected on the condition of estuarine resources, and the kinds of problems associated with them, in each conterminous coastal state and in Puerto Rico. In 2003, these data will be compiled for the first comprehensive National Coastal Assessment of estuarine condition in the contiguous U.S. This report also will compare the condition of estuaries in the period 1990-1997 to the period 2000-2001. For the first time, this will provide the public with a reliable picture of the current and changing condition of the Nations estuaries and coastal waters with known confidence, and using consistent measurements.

Integrated Ecosystem Modeling

In 2000 EPA produced a final report on the relationship between land-use patterns and water quality in watersheds of the Lake Superior basin, as well as a draft implementation protocol/prototype approach for estimating sediment loadings.

In 2000 Publication of a conceptual model for developing watershed assessment techniques has been delayed until 12/31/02.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003

Peer-reviewed draft TMDL Implementation Protocol/Prototype approach for estimating loadings of sediments to be used by OW, Regions, Tribal Governments, and States in implementation of CWA S.303.	1	protocol
Release of multimedia wildlife exposure assessment model which consists of a computer friendly system to assess and integrate exposures of wildlife to env. contaminants in soil,water,food,and air	31-Dec-2002	model
Develop expanded guidance for performing an ecological risk assessment; conduct a series of colloquia and a workshop on ecological assessment issues	30-Sep-2001	guidance
Final report on relationships between wetland extent and land-use patterns with stream water quality and biotic communities in watersheds of the Lake Superior basin.	1	report

Baseline: In response to the Clean Air Act amendments, actions were taken to reduce the causes of acid deposition and aid in the recovery of lakes and streams affected by this deposition. Our understanding of the expected rate and degree of recovery has been primarily based on results of similar actions in northern Europe. Research is being conducted to evaluate the status of acidic lakes and streams in the northeastern United States, a region sensitive to and impacted by acid deposition, to evaluate the degree to which the actions taken have been effective. This research focuses on measuring the end result of controls in place and will provide insights into whether additional controls are needed.

OBJECTIVE 02: IMPROVE SCIENTIFIC BASIS TO MANAGE ENVIRONMENTAL HAZARDS AND EXPOSURES.

Improve the scientific basis to identify, characterize, assess, and manage environmental hazards and exposures that pose the greatest health risks to the American public by developing models and methodologies to integrate information about exposures and effects from multiple pathways. This effort includes focusing on risks faced by susceptible populations, such as people differentiated by life stage (e.g., children and the elderly) and ethnic/cultural background.

Research

Human Health Risk Assessment Research

In 2003 Develop, summarize, integrate, and demonstrate an initial set of tools (methods, measurements, models) so EPA can assess aggregate exposures and risks from environmental contaminants in multiple media and determine how to best minimize/eliminate human and environmental harm from these contaminants.

In 2001 EPA developed a draft research strategy on human health risk assessment. Although publication has been delayed until FY 2002, the fundamentals of this strategy are being implemented into an analysis of data from the National Human Exposure Assessment Survey (NHEXAS).

In 2000 Reports on the use of mechanistic data in developmental toxicity risk assesssment and assessments of pesticide exposures to children were published. The Exposure Factors Handbook was released in FY 2001.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Assess pesticide exposures to children in Washington, Minnesota, and Arizona.		1				assessment
Report on the use of mechanistic data in developmental toxicity risk assesssment.		1				report
Develop Exposure Factors Handbook for children		1				Handbook
Publish peer reviewed research strategy on human health risk assessment.			0			resrch strategy
NHEXAS: Begin implementation of Strategic Data Analysis Plan.			1			strategic plan
Provide access to human exposure data via the world wide web to states, Regions, Program Offices, exposure modelers, and other stakeholders for use in aggregate and cumulative risk assessments.					1	data base
Test and evaluate a framework for modeling aggregate exposures from source through human exposure to human dose.					1	model
Publish data and results from the National Human Exposure Analysis Survey (NHEXAS) that will help characterize exposures to key pollutants and summarize human activities that impact exposure.					1	report
Analyze NHEXAS data for use in updating the Exposure Factors Handbook.					1	analysis

Baseline: Currently, risk assessments often focuses on a small component of the total exposure and risk that people face. Aggregate exposure and risk expands that consideration to include all the pathways and routes by which people come into contact with pollutants: it is a first step in understanding the cumulative total of peoples exposures and risks. A variety of tools (measuremnt and analysis methods, measurement studies and data, and human exposure/risk models) are currently under development to allow estimation of aggregate exposures and risks. In FY03, research will provide: improved information on sources of exposure; analysis of actual aggregate exposures of people in the U.S. as observed in probabilistic exposure measurement studies; development and demonstration of models for describing the many ways pollutants move from sources to exposures to human dose; and the

gathering together and publication of information and techniques needed to assess aggregate exposures and risk for use by the scientific community, risk assessors, and the public. Providing tools to assess aggregate exposure and risk is an initial step in understanding cumulative exposures and risks, and helping us move to more outcome-oriented measures of Agency actions to protect human health.

OBJECTIVE 03: ENHANCE CAPABILITIES TO RESPOND TO FUTURE ENVIRONMENTAL DEVELOPMENTS.

Enhance EPA's capabilities to anticipate, understand, and respond to future environmental developments; conduct research in areas that combine human health and ecological considerations; and enhance the Agency's capacity to evaluate the economic costs and benefits and other social impacts of environmental policies.

Research

Mercury Research

In 2003 Support development of regulations on mercury emissions from coal-fired utility boilers by producing data on measurement methods and control technology performance, cost, and residues so that EPA can effectively reduce human health and environmental risk from mercury.

In 2001 EPA developed a new peer-reviewed and consensus IRIS entry for methylmercury, including a reference dose (RfD). The results of bench and pilot testing aimed at managing mercury risks from coal-fired utility boilers was delayed until FY 2002.

In 2000 The mercury research strategy was completed as scheduled and will act as a guide in the execution of an EPA-based mercury research program.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Provide a mercury research plan to act as a guide in the execution of an ORD-based mercury research program.		1				plan
Publish results of bench and pilot testing aimed at identifying improved sorbents for mercury mitigation from coal-fired utility boilers.			0			publication
Make recommendations, as appropriate, for revision of EPA's RfD for methylmercury based on analysis of the National Academy of Sciences report on mercury.			30-Sep-2001			recommendations
Report on the performance/cost of reducing mercury emissions taking into account coal properties,combustion conditions, flue gas cleaning technologies and other air pollution control systems.					1	report

Baseline: EPAs Mercury Study Report to Congress identified emissions from coal-fired utilities as one of the most significant contributors of mercury to the air. On December 14, 2000, EPA determined that mercury emissions from coal-fired utilities needed to be regulated. Regulations are to be promulgated in three years and finalized a year after that. The most cost-effective technological approaches for controlling mercury emissions from utilities are not well understood. Control technologies must be evaluated prior to regulation with a goal of minimizing mercury emissions at the lowest possible cost.

OBJECTIVE 04: IMPROVE ENVIRONMENTAL SYSTEMS MANAGEMENT.

Provide tools and technologies to improve environmental systems management while continuing to prevent and control pollution and reduce human health and ecological risks originating from multiple economic sectors.

Research

Pollution Prevention Tools and Methodologies

In 2001 EPA integrated a waste reduction algorithm with costing software and a chemical process simulation package, and completed a decision support tool for life cycle analysis of municipal solid waste to enhance a preventive approach to risk management and the use of pollution prevention options.

In 2000 Computer-based tools capable of preventing or reducing pollution in chemicals and industrial processes were developed by completing the products listed below and other research activities.

In 2000 Decision-support tools and methods were developed which can be applied to determine the value and costs of solutions to environmental problems. Partnerships were also developed to assist community-based environmental programs in implementing these tools and methods.

In 1999 Completed a draft prototype decisoin support tool for alternative municipal solid waste management.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Complete prototype decision support software for alternative municipal solid waste management options.	30-sep-1999					
Complete dev. of the PARIS II Software, a tool to design env. benign solvents, & complete dev. & integration of WAR Algorithm, v 1.0, into a commercially available chemical process simulator		30-Sep-2000				software
Complete BETA testing of decision support tool for life cycle analysis of municipal solid waste management options.		30-Sep-2000				tool
Provide an upgraded & enhanced Solvents Alternatives Guide (SAGE) software (expert) to incl. cost algorithms, giving it cost projection capability to complement its process selection capability		30-Sep-2000				software

Integrate the process change/waste reduction algorithm (WAR) with costing software (Icarus) and a chemical process simulation package (Aspen).	1	package
Complete a decision support tool for life cycle analysis of municipal solid waste management options.	1	tool & report
Publish a peer-reviewed protocol for conducting Risk Management Evaluations.	0	protocol
Complete grant on development of tool for predicting biodegradability of compounds.	0	grant report

Baseline: Although pollution prevention is the preferred approach to protecting human health and the environment, implementation of preventive approaches is hampered by a lack of available information on comparative risks, effectiveness, and costs of alternatives. Current tools for evaluating proposed changes in products, processes, or system designs are focused on only a few sectors; limited in availability, ease of use, and application; and restricted in their capability to determine pollution levels, health and environmental impacts, and costs of the proposed changes. This research will produce a set of improved tools for the chemical, coatings, metal finishing and other sectors that will be widely available, easy to use, and applicable for evaluating alternative approaches and predicting results, at relatively low cost, prior to the investment of capital in these alternatives.

New Technologies

In 2003 Develop 10 testing protocols and complete 40 technology verifications for a cumulative Environmental Technology Verification (ETV) program total of 230 to aid industry, states, and consumers in choosing effective technologies to protect the public and environment from high risk pollutants.

In 2001 EPA developed, evaluated, and delivered technologies and aproaches that eliminate, minimize, or control high risk pollutants from multiple sectors. Delivery of the evaluative report on the Environmental Technology Verification (ETV) pilot program is delayed until FY 2002.

In 2000 A very successful pilot program to verify environmental technologies has been underway, producing a number of verified, innovative environmental technologies now commercially available by completing the products listed below and other research activities.

In 1999 Goal exceeded by three verifications for a total of 53 completed verification reports; 98 additional technologies in process and 202 applications pending; 65 protocols and generic test plans developed; 724 stakeholders in 15 stakeholder groups attended 32 stakeholder meetings.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Provide verification data on 50 or more technologies.	30-sep-1999					
Complete test protocols for all 12 ETV pilots will be available.		51				protocols
Verify 125 technologies (cumulative since 1996).		58				technologies

Deliver a Report to Congress on the status and effectiveness of the Environmental Technology Verification (ETV) Program during its first five years.	0		report
Complete performance evaluations of various metal finishing processes aimed at zero-discharge metal pretreatment as replacements for more hazardous processes.	1		report
Complete a capstone report summarizing current knowledge about volatile organic compounds and hazardous air pollutants emissions from paints used indoors.	1		report
Develop new process for drycleaning microelectronic wafers to decrease water usage and toxic chemicals.	0		grant report
Verify and provide information to States, technology purchasers, and the public on 40 air, water, pollution prevention and monitoring technologies for an ETV programmatic total of 230 verifications.		40	verifications
Complete an additional 10 stakeholder approved and peer-reviewed test protocols in all environmental technology categories under ETV, and provide them to testing organizations world-wide.		10	protocols

Baseline: Actual environmental risk reduction is directly related to performance and effectiveness of environmental technologies purchased and used. Private sector technology developers produce almost all of the new technologies purchased in the U.S. and around the world. Purchasers and permitters of environmental technologies need an independent, objective, high quality source of performance information in order to make more informed decisions; and vendors with innovative, improved, faster, and cheaper environmental technologies need a reliable source of independent evaluation to be able to penetrate the environmental technology market. In FY 02, the first year of operating, after the pilot period ended in FY 01, the Environmental Technology Verification (ETV) Program will have delivered in FY 02 more than 20 additional protocols, making them available to the entire research and testing community, and will have verified approximately 30 additional technologies for a programmatic total of 180, making data on their performance available for public use as well.

OBJECTIVE 06 : INCORPORATE INNOVATIVE APPROACHES.

Incorporate innovative approaches to environmental management into EPA programs, so that EPA and external partners achieve greater and more cost-effective public health and environmental protection.

GOAL 09: A CREDIBLE DETERRENT TO POLLUTION AND GREATER COMPLIANCE WITH THE LAW

EPA will ensure full compliance with laws intended to protect public health and the environment.

OBJECTIVE 01: INCREASE COMPLIANCE THROUGH ENFORCEMENT.

EPA and its state, tribal, and local partners will improve the environment and protect public health by increasing compliance with environmental laws through a strong enforcement presence.

Non-Compliance Reduction

In 2003	EPA will direct enforcement actions to maximize compliance and address environmental and human health problems.
In 2001	EPA directed enforcement actions to maximize compliance and address environmental and human health problems.
In 2000	Deterred and reduced noncompliance and achieved environmental and human health improvement. 74.9% of concluded enforcement actions required environmental or human health improvement, such as pollution reduction.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Millions of pounds of pollutants required to be reduced through enforcement actions settled this fiscal year.(core optional)		714	660		300	M pounds
Establish statistically valid noncompliance rates or other indiciators of noncompliance for selected environmental problems.		5				indicators
Establish baseline to measure percentage of significant violators wiith reocurring significant violations within 2 years of returning to compliance.		1				baseline
Establish baseline to measure average length of time for significant violators to return to compliance or enter enforceable plans/agreements		1				baseline
Produce a report on the number of civil and criminal enforcement actions initiated and concluded (core required)		1				Report
75% of concluded enforcement actions require physical action that result in pollutant reductions and/or changes in facility management or information practices. OECA wIll break out the %.			74		75	Percent

Develop and use valid compliance rates or other indicators of compliance for selected populations.	6	5	Populations
Reduce by 2 percentage points overall the level of significant noncompliance recidivism among CAA, CWA, and RCRA programs from FY 2000 levels	2.4		PercentagePoint
Increase by 2 percent over FY 2000 levels the proportion of significant noncomplier facilities under CAA, CWA, and RCRA which returned to compliance in less than two years. (core required)	1.33		PercentagePoint
Maintain or reduce the level of significant noncomplier recidivism under the CAA.		<=25	percent
Maintain or reduce the level of significant noncomplier recidivism under the CWA.		<=55	percent
Maintain or reduce the level of significant noncomplier recidivism under RCRA.		<=17	percent
Maintain or decrease the proportion of significant noncomplier facilities under CAA which returned to compliance in more thatn two years.		<=15	percent
Maintain or decrease the proportion of significant noncomplier facilities under CWA which returned to compliance in more than two years.		<=19	percent
Maiintain or decrease the proportion of significant noncomplier facilities under RCRA which returned to compliance in more than two years.		<=15	percent

Baseline: Protecting the public and the environment from risks posed by violations of environmental requirements is basic to EPA's mission. To develop a more complete picture of the results of the enforcement and compliance program, EPA has initiated a number of performance measures designed to capture the results of lowering the timeline for significant noncompliers to return to compliance, reducing noncompliance recidivism rates, and improvements in facility process and/or management practices through behavioral changes. The baseline rates for many of these measures were established in FY00. These measures will complement the traditional enforcement measures of inspections and enforcement actions to provide a more complete picture of environmental results from the enforcement and compliance program.

Inspections/Investigations

In 2003 EPA will conduct inspections, criminal investigations, and civil investigations targeted to areas that pose risks to human health or the environment, display patterns of non-compliance, or include disproportionately exposed populations.

In 2003 EPA will provide direct investigative, forensic, and technical support to the Office of Homeland Defense, FBI and /or other federal, state and local law enforcement agencies to help detect and prevent, or respond to, terrorist-related environmental, biological or chemical incidents.

In 2001 EPA conducted inspections and civil and criminal investigations targeted to areas with patterns of non-compliance, that pose risks to human health or the environment, or incldue disproportionatley exposed populations.

In 2000 Conducted 20,123 inspections, 477 criminal investigations, and 660 civil investigations, 15% of which were targeted at priority areas.

In 1999 We exceeded our goal to deter noncompliance by maintaining levels of field presence and enf. actions, particularly in high risk areas and/or where populations are disproportionately exposed. In 1999, EPA conducted 21,410 (15,000 target) inspections and undertook 3,935 (2,600 target) enf. actions.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of EPA inspections conducted (core required)		20,123	17,812		14000	inspections
Percent of inspections and investigation (civil and criminal) conducted at priority areas		15				percent
Number of Criminal Investigations		477	482		400	Investigations
Develop a list of high priority facilities in Indian country for the enforcement and compliance program.			1			list
Number of Civil Investigations		660	368		180	Investigations
Establish minimum core compliance monitoring program for selected high priority facilities in Indian country.					4	Percent
EPA will respond to investigative leads that relate to security of homeland environment, FBI requests for support, and participate in all National Special Security Events as requested.					100	percent

Baseline: The compliance monitoring program works with states and tribes to target areas that pose risks to human health or the environment, display patterns of noncompliance, or include disproportionately exposed populations. The number of inspections projected varies each year by the complexity of facilities targeted. In FY03, EPA will maintain its enforcement presence by conducting at least 14,000 inspections, 400 criminal investigations and 180 civil investigations.

Quality Assurance

In 2003 Identify noncompliance, and focus enforcement and compliance assurance on human health and environmental problems, by maintaining and improving quality and accuracy of data.

In 2001 EPa maintained and continued to improve enforcement and compliance data used to identify noncompliance and focus on human health and environmental problems.

In 2000 Maintained and improved quality and accuracy of enforcement and compliance assurance data. Completed the concept and requirement phase of new Integrated Compliance Information System. Continued concept phase of Permit Compliance System modernization and began the design phase.

In 1999 We met our goal by targeting 7 (of 5 targeted) high priority areas through the MOA process for enforcement and compliance assistance and completing 2 (of 2 targeted) baseline data assessment in major databases, AFS and DOCKET, needed to measure quality of key indicators of compliance.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Complete concept and begin design phase of General Enforcement Mgt system (GEMS)		30-Sep-2000				date
continue concept phase and begin design phase of PCS modernization		30-Sep-2000				date
Complete Phase I of Integrated Compliance Information System (ICIS) development (programming) and begin Phase II.			1			Phase
Operate 14 information systems housing national enforcement and compliance assurance data with a minimum of 95% operational efficiency.			95			Percent
Design and develop Phase II of ICIS (modernization of the Permit Compliance System (PCS)) by September 2003.					1	Data System
Ensure that enf. and compl. data is reported in 14 nat. info. systems to provide Fed. and state programs accurate and timely data through which env. and human health problems can be identified.					95	efficiency

Baseline: EPA's ability to target and measure effectiveness of its enforcement activities depends upon reliable and up-to-date data systems. EPA's 14 data systems will continue to operate at 95% or better operational efficiency. In conjunction with the operation and maintenance of existing systems, EPA will continue its system modernizing efforts and improve data integration and consistency.

Capacity Building

In 2003 Improve capacity of states, localities and tribes to conduct enforcement and compliance programs. EPA will provide training as well as assistance with state and tribal inspections to build capacity, including implementation of the inspector credentials program for tribal law enforcement personnel.

In 2001 OECA improved the capacity of states. localities and tribes to conduct enforcement and compliance programs.

In 2000 Improved capacity of states, localities and tribes to conduct enforcement and compliance assurance programs. Conducted 713 EPA-assisted inspections and delivered 154 training classes/seminars to states/localities and tribes.

In 1999 We exceeded (by 135) our goal of providing specialized assistance and training courses to state and tribal officials to enhance the effectiveness of their programs.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Specialized assistance & training	218					Courses
Number of EPA-assisted inspections to build capacity		713				inspections
Conduct EPA-assisted inspections to help build state program capacity			895		250	Inspections
The National Enforcement Training Institute will train Tribal personnel.			428			personnel
Provide tribal governments with 50 computer-based training (CBT) modules.			235		50	Training module

Baseline: Improve capacity of states, localities and tribes to conduct enforcement and compliance programs by providing training as well as assistance with state and tribal inspections.

International Enforcement

In 2003 Ensure compliance with legal requirements for proper handling of hazardous waste imports and exports.

In 2001 EPA did ensure compliance with legal requirements for proper handling of hazardous waste imports and exports.

In 2000 Ensured compliance with legal requirements for hazardous waste exports and gained enforcement and compliance cooperation with other countries, especially along U.S. borders (Mexico/Canada).

In 1999 We missed our target by properly handling 1,539 of the targeted 1,600 import notifications due to a decline in haz waste imports and increased capacity in Europe to handle waste. In addition, we changed our goal and measure in FY 2000 to more accurately reflect program achievements.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Import / Export Notifications	1539					Notifications
Ensure proper handling of 200,000 tons of hazardous waste exports	n/a					tons

Track, consent to, and /or acknowledge the movement of haz.wastes into and out of the U.S. to ensure proper management to protect the env. and public health and safety.	100	percent

Baseline: In FY03, EPA will review and respond to 100 percent of the notices for transboundary movement of hazardous waste, ensuring that these wastes are properly handled in accordance with international agreements and the Resource Conservation and Recovery Act regulations.

OBJECTIVE 02: PROMOTE COMPLIANCE THROUGH INCENTIVES AND ASSISTANCE.

EPA and its state, tribal, and local partners will promote the regulated community's compliance with environmental requirements through voluntary compliance incentives and assistance programs.

Compliance Incentives

In 2003 Increase opportunities through new targeted sector initiatives for industries to voluntarily self-disclose and correct violations on a corporate-wide basis.

In 2001 EPA increased opportunities through targeted sector initiatives for industries to use one of the self-disclosure policies.

In 2000 Increased entities self-policing and self-correction of environmental problems through use of small business and small community policies.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of facilities that self-disclosed potential violations.		2,200				facilities
Facilities voluntarily self-disclose and correct violations with reduced or no penalty as a result of EPA self-disclosure policies.			1754		500	Facilities
Increase opportunities for corporate-wide voluntary self-disclosure through targeted sector initiatives.					2	initiatives

Baseline: EPA developed its Audit/Self-Policing Policy in 1995 to encourage corporate audits and subsequent correction of self-discovered violations. That Policy as well as the Small Business Compliance Policy were modified in FY00. The Agency is working to expand the use of the Audit Policy through aggressive outreach to specific sectors. In FY01 the performance measure was modified to reach settlements with 500 facilities to voluntarily self-disclose and correct violations. This same measure has been carried continued.

Regulated Communities

In 2003 Increase the regulated community's compliance with environmental requirements through their expanded use of compliance assistance. The Agency will continue to support small business compliance assistance centers and develop compliance assistance tools such as sector notebooks and compliance guides.

In 2001 EPA continued to expand the compliance assistance program for the regulated community.

In 2000 Increased the regulated community's compliance with environmental requirements through use of compliance assistance; 455,581 facilities were reached and 140 compliance assistance tools were developed.

In 1999 We met our goal of inc. use of comp. incentives and the understanding of, and ability to comply with, reg. requirements by operating 9 small bus. compl. asst. centers (meeting target), completing10 sector notebooks, guides, etc, (target 5), and conducted 22 (target 15) Fed. fac. mgt. reviews.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Compliance Assistance Centers in Operation	9					Centers
Compliance Tools Development	10					Sector Guides
Federal Facility Management Reviews	22					Reviews
Total number of facilities reached through targeted compliance assistance		455,581				facilities
Number of compliance assistance tools developed.		140				tools
EPA will complete 80% of the compliance assistance tools listed in the previous year's compliance Assistance Activity Plan.					80	Percent
50% of recipients of compliance assistance from funded assistance pilot projects will increase their understanding of environmental requirements or facility management practices. (Core optional)					50	Percent
Number of facilities, states, technical assistance providers or other entities reached through targeted compliance assistance (core optional)			550,000		475,000	Entities
Develop compliance assistance tools listed in the Compliance Assistance Plan.			203			Tools
Increase compliance assistance center usage.	36					percent

Number of tribally owned/managed entities reached through the Agency's targeted compliance assistance.	249	30	entities
70% of survey respondents find the Compliance Assistance Center useful to very useful in helping them understand applicable environmental regulations		70	percent
60% of servey respondents took an action, in whole or in part, due to information found through Center services or resources.		60	percent

Baseline: EPA provides clear and consistent descriptions of regulatory requirements to assure that the community can understand its obligations. EPA supports initiatives targeted toward compliance in specific industrial and commercial sectors or with certain regulatory requirements. Compliance assistance tools range from plain-language guides, fact sheets, checklists and newsletters. New distribution methods include the on-line Clearinghouse. In FY03, EPA is planning to reach 475,000 facilities, states, or technical assistance providers through targeted compliance assistance efforts.

GOAL 10: EFFECTIVE MANAGEMENT

EPA will maintain the highest-quality standards for environmental leadership and for effective internal management and fiscal responsibility by managing for results.

OBJECTIVE 02: PROVIDE LEADERSHIP

Provide vision, national and international leadership, executive direction, and support for all Agency programs.

OBJECTIVE 03: MANAGE FOR RESULTS THROUGH SERVICES, POLICIES, AND OPERATIONS.

Demonstrate leadership in managing for results by providing the management services, administrative policies, and operations to enable the Agency to achieve its environmental mission and to meet its fiduciary and workforce responsibilities and mandates.

Strengthen EPAs Management

In 2003 Strengthen EPA's management services in support of the Agency's mission while addressing the challenges included in the President's Management Agenda

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Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Number of Agency offices using the workforce planning model which identifies skills and competencies needed by the Agency for strategic recruitment, retention and developmental training.					5	Offices
Percentage of total eligible service contracting dollars obligated as performance based in FY2003.					30	Percent

Baseline: Based on FY 2002 performance, baselines are: Zero for number of Agency offices using the workforce planning model; 20% for performance-based contracts, and an unqualified opinion for financial statements.

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Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Agency audited Financial Statements are timely, and receive an unqualified opinion.					one	Finan statement

Baseline: Based on FY 2002 performance, baselines are: Zero for number of Agency offices using the workforce planning model; 20% for performance-based contracts, and an unqualified opinion for financial statements.

OBJECTIVE 03: PROVIDE QUALITY WORK ENVIRONMENT.

Effectively conduct planning and oversight for building operations and provide employees with a quality work environment that considers safety, new construction, and repairs and that promotes pollution prevention within EPA and with our state, tribal, local, and private partnerships.

Energy Consumption Reduction

In 2003 By 2003, EPA will achieve a 15% energy consumption reduction at its 21 laboratories.

In 2001 In FY 2001 the Agency completed projects which will significantly reduce energy consumption at five EPA-owned laboratories.

In 2000 EPA has implemented an aggressive strategy to reduce energy consumption in its facilities. As a result of this strategy, the Agency has reduced its total energy consumption by 19% over 1985 baseline.

In 1999 EPA continues to pursue its energy efficiency performance goals throughout its owned laboratory facilities which ensure the Agency achieves a high level of environmental, economical, and operational building safety. EPA implemented energy savings and pollution prevention techniques at 4 labs.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Improve energy efficiency and reduce energy consumption in EPA labs.	4					Labs
Energy consumption of BTUs per square foot.		304000				BTUs per Sq/Ft
Number of energy saving projects at EPA owned facilities.			5			Projects
Cumulative percentage reduction in energy consumption (from 1990).					15	Percent

Baseline: In FY 2000, energy consumption of British Thermal Units (BTUs) per square foot is 320,000 BTUs per square foot.

OBJECTIVE 04: PROVIDE AUDIT, EVALUATION, AND INVESTIGATIVE PRODUCTS AND SERVICES

Provide audit, evaluation, and investigative products and advisory services resulting in improved environmental quality and human health.

Fraud Detection and Deterrence

In 2003 Improve Agency management and program operations by identifying savings, recoveries , and fines equaling 150 percent of the investment in the OIG, and by preventing fraud and reducing the risk of loss through 50 criminal, civil, or administrative actions.

In 2001 We met our goal to increase our effectiveness in detecting & deterring fraud & other improprieties that undermine the integrity of Agency programs/resources. Investigations resulted in 120 judicial, administrative & other actions taken to enforce laws & reduce/avoid risk & $5.3 millions in savings.

In 2000 OIG met its goal to increase its effectiveness in detecting and deterring fraud and other improprieties by increasing the number of assistance agreement and contract cases, improving the percentage of cases referred for action, and reducing the average time for case completion.

In 1999 Office of Investigations increased its effectiveness in detecting & deterring fraud & other improprieties by increasing the number of assistance agreements & contract cases, improving the % of cases referred for action, reducing average time of case completion, & more fraud awareness briefings.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Monetary value of fines, judgments, settlements, restitutions, and savings.	$.8	70.8				Million
Judicial, administrative, and other actions taken to enforce law, reduce or avoid risk.	73	107				Actions
Percentage of cases completed resulting in referrals.		51.3				% Of Cases
Percentage of cases completed or referred within one year.		48.2				% Of Cases
Number of judicial, administrative, or other actions taken.					50	Actions
Return on the annual dollar investment in the OIG					150	Percent

Baseline: In FY 2001, the OIG will identify savings, recoveries, and fines at a baseline of $44.3 million and reduce the risk of loss through criminal, civil, or administrative actions at a baseline of 54 actions.

Audit and Advisory Services

In 2003 Improve environmental quality and human health by recommending 75 improvements across Agency environmental goals, identifying and recommending solutions to reduce 20 of the highest environmental risks, and identifying 20 best environmental practices.

In 2001 The OIG exceeded its annual performance goals of providing timely, independent auditing and consulting services responsive to the needs of our customers that provide value to the agency and recommendations to improve program and operational performance and integrity.

In 2000 OIG provided timely, independent auditing and consulting services responsive to the needs of customers/stakeholders by identifying opportunities for increased economy, efficiency, and effectiveness in achieving environmental results. OIG audit products and services are more customer and goal driven.

In 1999 The Office of Inspector General provided objective, timely, and independent auditing, consulting, and investigative services through such actions as completing 24 construction grant closeout audits.

Performance Measures	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Potential monetary value of recommendations, questioned costs, savings and recoveries.	124.9	55.3				Million
Examples of IG recommendations/advice or actions taken to improve the economy, efficiency, and effectiveness of business practices and environmental programs.	60	78				Examples
Construction Grants Closeout Audits	24					Audits
Overall customer and stakeholder satisfaction with audit products and services (timeliness, relevancy, usefulness and responsiveness.		76				Percent
Number of environmental improvements made, reductions in environmental risks.					95	Improvements
Number of best environmental practices identified					20	Practices

Baseline: In FY 2001, the OIG will recommend improvements across the Agency environmental goals and recommend solutions to reduce the highest environmental risks at a baseline of 68 recommendations.