United States
Environmental Protection
Agency

Region 10
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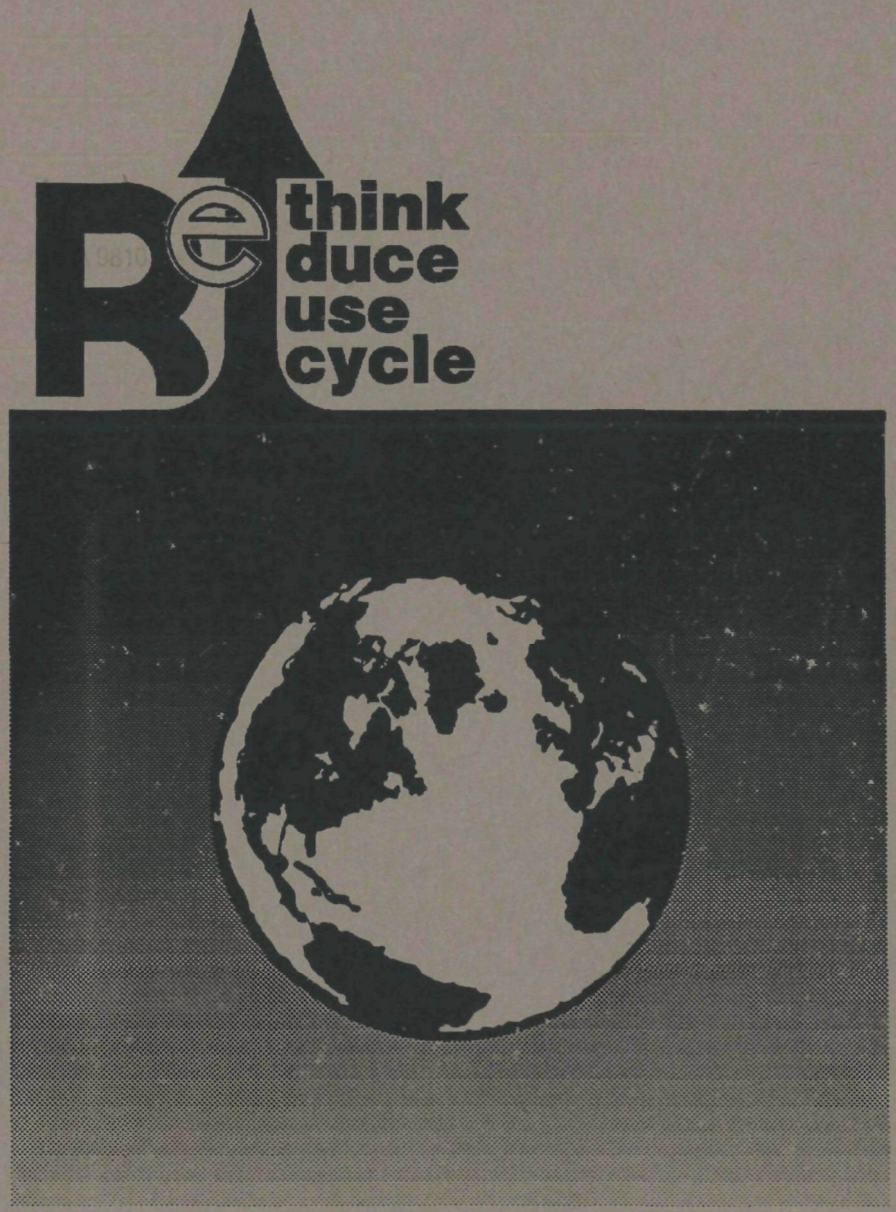
Alaska
Idaho
Oregon
Washington

EPA

Region 10 Pollution Prevention Action Plan

December 1991



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REGION 10 POLLUTION PREVENTION ACTION PLAN

December 1991

INTRODUCTION AND OVERVIEW

This Action Plan describes Region 10's effort to develop a clear, concrete pollution prevention strategy that includes every part of the organization. It outlines the process by which the Action Plan was developed, long-term objectives, and fiscal year 1992 (FY92) activities. While this document is valuable in recording current activities and future directions, our primary objective in developing an Action Plan was to integrate pollution prevention into all Region 10 activities and to energize programs to undertake prevention activities. Thus this document is less important than the process of identifying - and accomplishing - preventive activities.

GOAL

To protect human health and the environment by preventing, rather than reacting to, waste generation and environmental degradation.

WHAT IS POLLUTION PREVENTION?

Pollution control programs of the past 20 years have emphasized containment and treatment. The widespread use of air pollution scrubbers, wastewater treatment, and landfill disposal demonstrate the extent of reliance on control technologies. Over the past two decades there have been dramatic improvements in the environmental problems that have been the targets of our programs. In the next twenty years, however, we will face problems, such as hazardous chemical releases from large numbers of small sources, for which end-of-pipe control programs may not provide the best solutions. Many of today's environmental problems are better addressed by **preventing** pollution at its source, rather than controlling it after it's been generated.

Pollution prevention is the use of processes, practices or products that reduce or eliminate the generation of pollutants and wastes and that protect natural resources.

It means striving to move to the top of a hierarchy of environmental protection practices:

- **Avoidance** of environmental damage through thoughtful planning and design;
- **Use and source reduction** to eliminate pollution arising from the manufacture and use of products;

- **Environmentally sound reuse and recycling** of those wastes that cannot be eliminated;

- **Treatment** of wastes to minimize human and environmental exposure to such pollutants; and

- **Disposal** of any residuals that have not been eliminated, recycled or treated.

Pollution prevention (P2) is not so much an alternative to traditional end-of-pipe control methods as an expansion of the means we use to limit pollution. While point source, end-of-pipe controls are still a central part of pollution control, P2 expands our overall approach to include in-plant product and process change, consideration of environmental effects in design (i.e., before pollution is created) and stewardship of our natural resources for future generations' use and enjoyment.

POLLUTION PREVENTION AND RISK REDUCTION

Region 10 is striving to integrate P2 and efforts to target programs based on ecological and human health risk. In essence, our philosophy is that risk should be the primary means of setting priorities, targeting efforts, and measuring environmental results; and that prevention is the preferred means of solving environmental problems. Prevention is a necessary risk reduction strategy in that many of the highest risk problems are characterized by sources, such as automobiles, that do not lend themselves easily to traditional regulation. In the long run, prevention is also likely to be the most cost-effective strategy for dealing with environmental problems.

The integration of pollution prevention and risk reduction also leads us to define the P2 program broadly, to include programs such as non-point source control and wellhead protection in addition to minimization of industrial toxics, since many risks are not caused by industrial sources. Consistent with the Science Advisory Board's Reducing Risk report, we also emphasize the importance of ecological and natural resource protection, as well as prevention of pollution that poses a risk to human health.

THE NATIONAL POLLUTION PREVENTION PROGRAM

The Pollution Prevention Act of 1990 sets the framework for EPA's national prevention program. The Act establishes a hierarchy of environmental protection practices as national policy; and directs EPA to facilitate the adoption of source reduction techniques by businesses and federal agencies, to review regulations to determine their effect on source reduction, to investigate opportunities to use federal procurement to encourage source reduction, and to award grants to states.

EPA's Pollution Prevention Strategy (February, 1991), sets EPA's future direction in P2. It emphasizes incorporation of prevention into all EPA's programs using both command-and-control techniques and alternative, voluntary, and incentive-based approaches, where practical. It also outlines a set of "sector" strategies, the first of

which is the industrial toxics-oriented "33/50 Program," which seeks voluntary reduction of 17 targeted industrial chemicals.

In reality, the "national" P2 program consists not only of EPA efforts, but also of the activities of state and local governments, and private firms and institutions. Some of the activities these organizations are involved in are environmental auditing, facility planning to reduce chemical releases, research into alternative processes, municipal wastewater prevention, and consumer guides and labels.

DEVELOPING THE REGIONAL ACTION PLAN

Organization

Overall P2 efforts within Region 10 are guided by a Steering Committee made up of managers from all major offices within the Region (see Figure 1). The Regional Pollution Prevention Coordinator is in the Policy, Planning, and Evaluation Branch (Management Division), and is responsible for the following staff activities:

- staff support to the Steering Committee and Regional Administrator/Deputy Regional Administrator (RA/DRA)
- liaison and participation in national P2 activities
- coordination and promotion of P2 within the Region
- direct administration of certain programs, such as state grants and Green Lights

Other dedicated P2 staff are in the Hazardous Waste Division, which provides technical assistance and other support to state programs; and Air and Toxics Division, which leads the 33/50 toxics reduction program. Staff in every division work on P2 activities (not always called by that name).

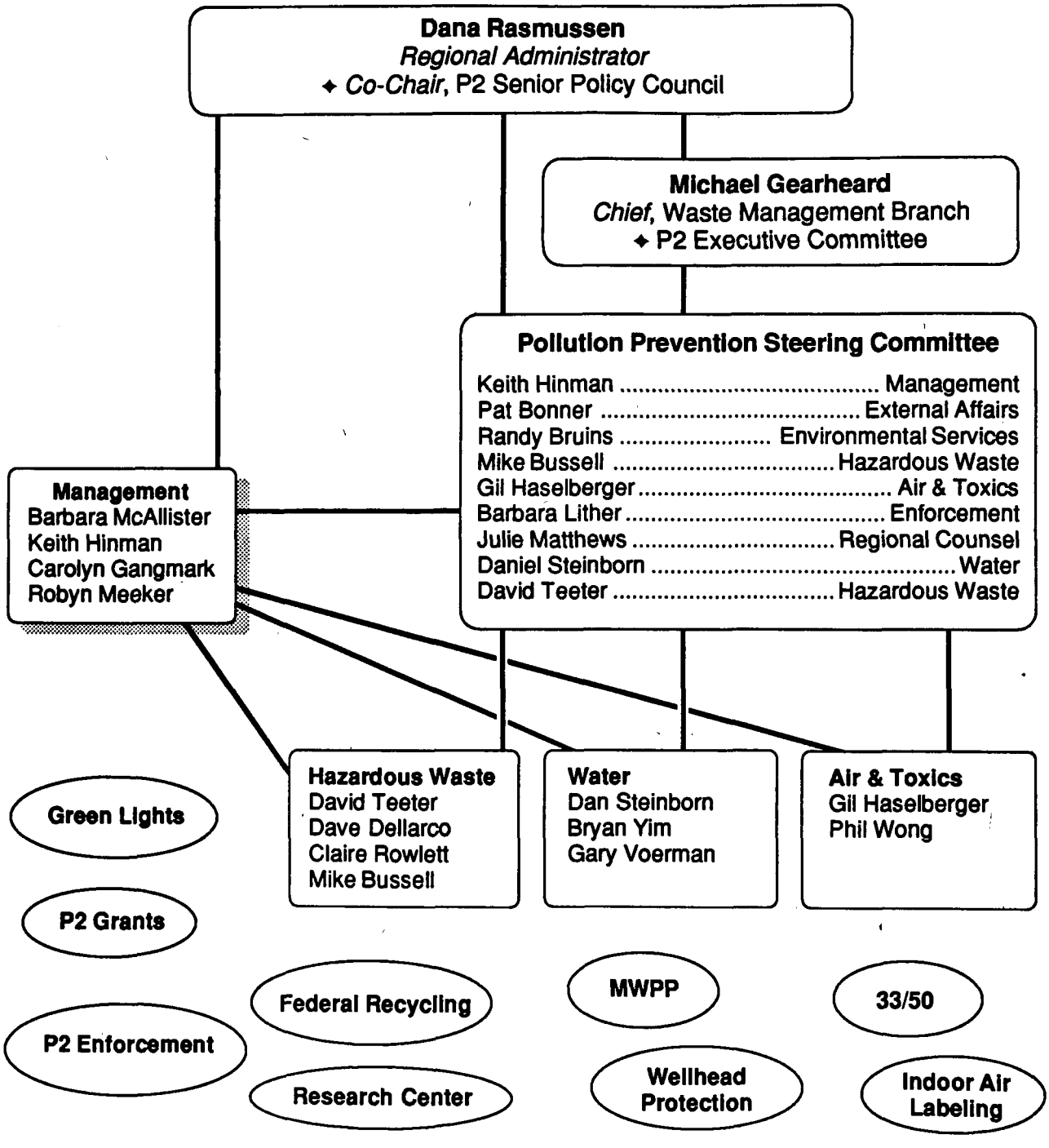
Approach

Our objective in developing a Regional Action Plan was to familiarize all offices in the Region with P2 and spur Regionwide thinking and action on P2. We wished to develop a comprehensive, multi-media P2 program that integrated prevention into Regional activities.

Regionwide training was the cornerstone of the process. P2 staff provided office-by-office training to over 20 different groups within the Region. Sessions consisted of basic information and familiarization with P2 concepts and activities; followed by "brainstorming" sessions at which each program (typically a branch) was asked to define what P2 meant for that program, what current activities were, possible future directions, commitments for FY92, and finally, barriers to P2 implementation. Few groundrules were set and creativity was encouraged.

Figure 1:

Region 10 Pollution Prevention Team



OVERVIEW OF REGIONAL STRATEGY

The ultimate objective of the Regional Action Plan is risk reduction, and the preferred means is through prevention, as shown in Figure 2. Pollution prevention activities fall into two general categories: those that build P2 programs within EPA, state and local government, and private institutions (the agencies delivering services); and those designed to change behavior and directly prevent pollution, targeted at various industry, commercial, and individual/consumer audiences.

Building P2 Programs

At this early stage of the prevention effort, activities to build P2 programs are an important emphasis. Examples include **training**, such as workshops for state waste auditors provided through P2 grants, and program **planning** activities such as this report. **"Cheerleading,"** or promotion of P2, includes such activities as emphasizing P2 objectives in speeches by the RA, in news articles, and through training and staff meetings; and sponsoring conferences, such as the recently held multi-media symposium for state environmental managers.

Grants, such as the Pollution Prevention Incentives for States (PPIS) and Risk Reduction through Pollution Prevention (R2P2) programs, are an important source of support for state programs and provide an opportunity for EPA involvement and influence. The Region plays an important role in **coordinating** activities Regionwide by maintaining a Regional Roundtable of state P2 programs, so that efforts can be coordinated and information exchanged. A key initiative to conduct and disseminate P2 **research** is the creation of an EPA-sponsored public/private entity, the Pacific Northwest Pollution Prevention Research Center.

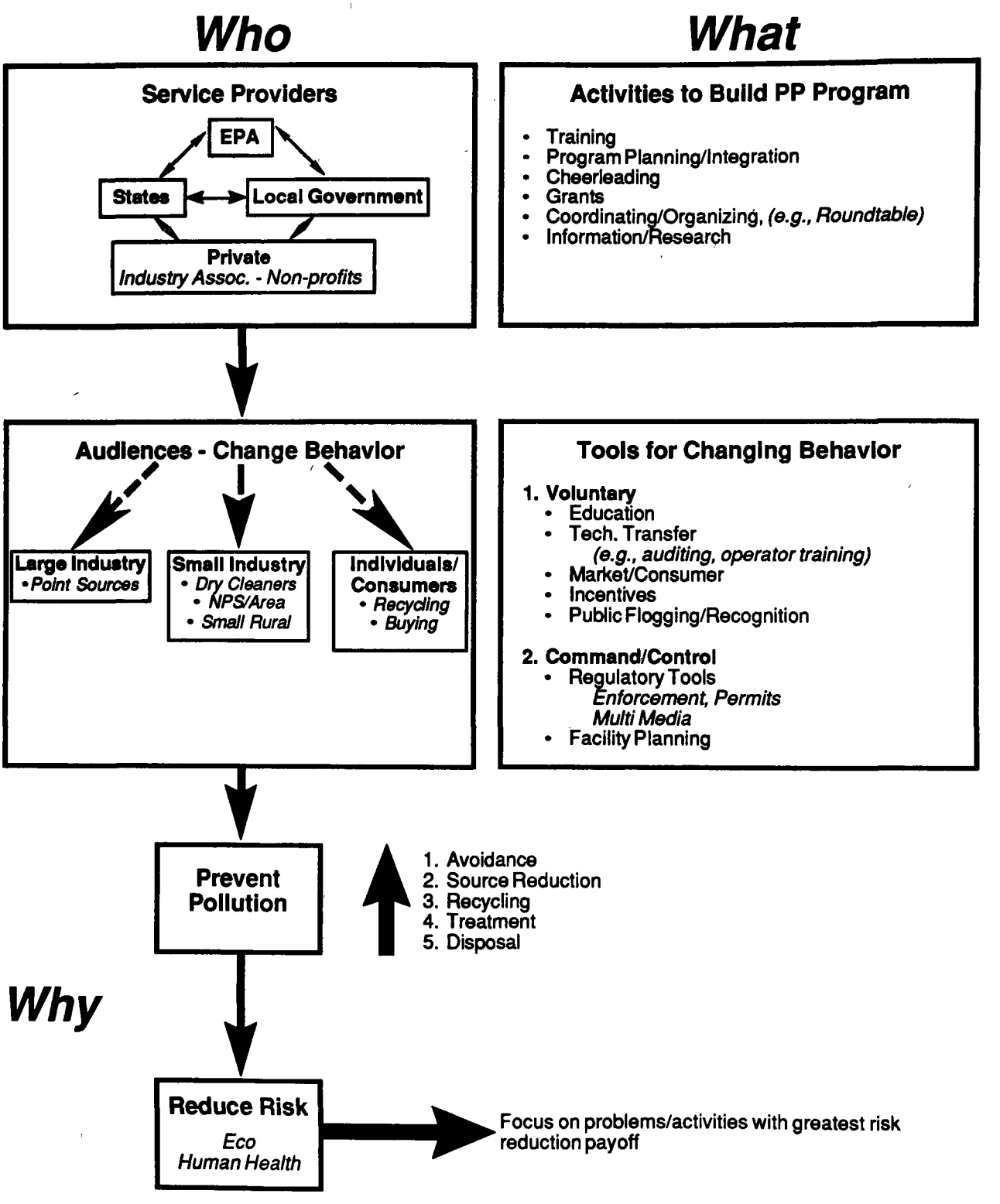
Changing Behavior: Combining Regulatory and Voluntary Approaches

The purpose of building P2 programs is ultimately to prevent actual pollution by changing the behavior of industry or individuals. Tools for changing behavior include command-and-control means (most of what EPA does) and voluntary approaches, which are particularly emphasized in pollution prevention, where regulatory authority is often lacking or would not be effective. Region 10 is attempting to use a balanced approach to prevention that uses all available approaches.

Within budget constraints, the Region is emphasizing voluntary prevention through public **education**. Some programs, such as the Region's indoor air/radon and urban pesticides programs, rely primarily on education of populations at risk. The Region is upgrading its public education program in FY92 with an education coordinator and Regionwide strategy, which will emphasize P2.

Technical assistance (e.g., plant audits) has been the primary emphasis of P2 and waste minimization programs to date, and continues to be central to Regional prevention efforts. EPA supports state technical assistance programs in Northwest states through grants, training, and efforts such as the Agricultural Chemicals Two Percent

Figure 2:
Pollution Prevention in Region 10
A Strategy Framework



project and the recent Green Lights conference in Portland. Accomplishing P2 through **consumer information and producer incentives** is a promising idea, but the Region does little in these areas at present. **Public recognition**, positive or negative, can be a powerful force and one that is relied upon by the voluntary 33/50 program to reduce 17 industrial toxics.

While most pollution prevention programs have focused on voluntary reductions, the Region is attempting to balance that approach by using regulatory tools to prevent pollution. Several programs, notably Toxic Substances Control Act (TSCA), have successfully used **enforcement** settlements as a way to reduce pollution (i.e., prevention in lieu of fines). The Region's Resource Conservation and Recovery Act (RCRA) program has begun to use permitting and reporting to enhance prevention. Prevention lends itself to **multi-media** approaches, and the Region is piloting an effort to incorporate prevention into multi-media enforcement actions within the pulp and paper industry. The Region also provides support to Washington and Oregon in the implementation of their new **facility planning** laws requiring pollution reduction plans from large facilities.

Highlights of Regional Plan

The following chapters of this plan are organized by program office, reflecting EPA's organization. Many of the activities described, however, are cross-cutting; similar activities are under way simultaneously in many programs, and a number of initiatives that originated in one program now involve multi-media participation. Figure 3 displays selected highlights of the Region 10 P2 Action Plan:

- **"Getting Organized"** shows some of the key activities in building a P2 program in the Region (described above).

- **"Leading By Doing"** lists actions that the Region is taking to get its own house in order and lead by example. These include in-house recycling, other "office practices," such as procurement of recyclable fax paper and use of electronic communication in lieu of paper-consumptive hard copies, and a project to foster employee use of mass transit.

- **Integrating Into EPA Programs** shows some of the ways in which programs are incorporating P2 into their mainstream work. Regulatory efforts are balanced by the carrot of technical assistance, in such diverse areas as non-point sources, indoor air, wellhead protection and solid waste.

- **Building State Programs** is a critical activity since states are the primary agencies delivering services in the field. In addition to the grants and Regional Roundtable described above, the Region supports Washington's Municipal Wastewater Pollution Prevention Program and is working with the Roundtable to put on a P2 symposium for state managers in all media programs.

Figure 3:

Region 10 Pollution Prevention Activities: HIGHLIGHTS

GETTING ORGANIZED

- Steering Committee *(p. 3, 18)*
- Action Plans *(p. 3)*
- Training *(p. 3)*
- Target High Risks/Protect Natural Resources *(p. 2)*

LEADING BY DOING

- Recycling *(p. 12, 19, 45...)*
- Office Practices (e.g., Procurement)*(p. 11, 15, 22...)*
- Transit Project *(p. 13, 21)*

INTEGRATING INTO EPA PROGRAMS

- Enforcement *(p. 7, 16...)*
- Permitting *(p. 7, 37...)*
- Agricultural Chemicals (2%) *(p. 5, 19, 34...)*
- Indoor Air Labeling *(p. 38)*
- Wellhead Protection *(p. 37)*
- Solid Waste *(p. 45)*

BUILDING STATE PROGRAMS

- State Grants (PPIS, R2P2, MWPP) *(p. 5, 18, 36...)*
- Northwest Regional Waste Reduction Roundtable *(p. 5, 45)*
- Municipal Wastewater Pollution Prevention *(p. 7)*
- Multi-media Pollution Prevention Symposium *(p. 47)*
- Measuring Results *(p. 21, 46)*
- Northwest Regional Market Development Roundtable *(p. 47)*

EDUCATION: CHANGING BEHAVIOR

- Local outreach (e.g., schools, Goodwill Games) *(p. 18, 32, 33...)*
- K-12 Education Initiative (2%) *(p. 7, 19)*
- Program outreach (e.g., Radon, Urban Pesticides) *(p. 5, 38, 40...)*

SPECIAL INITIATIVES

- 33/50 - Industrial Toxics *(p. 3, 40...)*
- Green Lights *(p. 13, 19, 20...)*
- Pacific Northwest Pollution Prevention Research Center (2%) *(p. 5, 19, 45)*
- Federal Recycling *(p. 19)*
- Coast Guard Model Base *(p. 7)*
- Pulp and Paper (2%) *(p. 20)*
- Stillaguamish Indians - Water Conservation *(p. 7, 19)*

- **Education** is important for directly informing or persuading people to change behavior. Regional personnel engage in outreach to schools and interested or target groups, and participate in the national K-12 Education Initiative.

- **Special Initiatives** covers a number of pilot projects to test new approaches to prevention. Most of these projects - working with the Coast Guard to develop a "model base" prevention program, cooperating with a pulp and paper facility to develop a model P2 plan, supporting the Stillaguamish Indians in a water conservation/public health protection program - are multi-media, interagency, and/or public/private ventures.

Challenges for the Future

In preparing this plan, program offices were asked to identify barriers to building P2 into the Region, as well as recommendations for management or other programs. While these barriers and recommendations are identified in the body of the report to follow, certain issues cut across programs.

- **Resources.** Limited resources, the lament of every program manager, are a particularly acute problem for P2 because there are very few dedicated P2 resources in the Region. While the Region believes that P2 can in many cases be integrated into the programs, dedicated staff are needed to plan, coordinate, train, develop programs, and undertake new activities. In effect, Regional programs are currently "funding" P2 efforts by borrowing resources provided for other purposes. At a minimum, staff working on P2 need to be given credit for their activities through performance agreements, accountability, and awards. Over time, EPA should promote explicit budgeting that reflects the cost of pollution prevention activities in enforcement, permitting, education, and technical assistance. Through strategic planning, program managers should be encouraged to integrate pollution prevention into programs and weigh trade-offs against potentially less important activities.

- **Management Direction and Support.** P2 has suffered from shifting priorities and commitment at both the Regional and national levels. Some of these problems are probably growth pains for a new and ambitious program. Hopefully, this plan, the national reorganization, and the P2 strategy will help to clarify direction. It is imperative that Regional and national policy-makers settle on a set of priorities that are maintained over time, and are supported by strong, stable management commitment. To help communicate the priority of P2 in the Region, the Steering Committee recommends that the RA/DRA require Division/Office Directors to report quarterly on their progress in implementing P2 - this plan - in their programs.

- **EPA Leading By Example.** Nothing is more effective in leading the way into the brave new world of prevention than the example the Region sets by its own practices. Nothing will undermine the program's credibility more quickly than lagging in this area. While the Region's record in this area is reasonably good, there is far more we can do in promoting use of unbleached, recycled paper, procuring "green" products, reducing paper use through automation, promoting mass transit, and the like. The Region should strive to be a leader among federal agencies, and work actively with GSA to overcome barriers and promote environmentally aware practices by all federal agencies.

- **Existing Regulations.** Inflexible regulations sometimes serve as a barrier to incorporating P2 into EPA's existing programs. Barriers include the general: lack of explicit legal authority to promote P2, lack of incentive for programs and industry to go beyond what the regulations require; and the specific: concern about the legal implications of providing P2 advice during inspections, a requirement that recycling proceeds be returned to the Treasury, and too narrow a definition of Best Management Practices in the water permit program. Managers must encourage staff to identify such barriers and actively assist in overcoming them. The Region should work to assure that national program operating guidance emphasizes pollution prevention as a priority and encourages flexibility in accomplishing P2.

- **Inspections and Enforcement.** Enforcement is a promising area for incorporating more prevention; however, more needs to be done to realize its potential. Some issues (i.e. penalty policies, dollar fines versus "softer" prevention outputs) need to be resolved, and inspectors should be trained to be aware of P2 goals and technical resources. Regional and Agency management should clearly emphasize their support for P2 in enforcement, even when it involves some risk. Enforcement officials at both the Regional and national level should work to overcome barriers and ambiguities in current policy.

- **Education/Outreach.** Nearly every program identifies more education and outreach as a key strategy for preventing pollution, both because it is often more effective than command-and-control and because many important sources are not covered by regulation. To be effective, the Region (and EPA as a whole) will need to substantially increase its resources and expertise in this area. The Region should implement its strategic plan to create a Regional education program, with P2 as a key message.

The remainder of the report describes Region 10 Pollution Prevention activities in more detail. These descriptions are organized by program, as well as in two cross-cutting sections--Leading by Doing and Regionwide Barriers/Suggestions. Each section summarizes three types of P2 activities/projects:

- **Ongoing P2 Activities**--Programs already underway and continuing during FY92.
- **New P2 Projects in FY92**--New projects being undertaken starting in October 1991.
- **Potential P2 Projects**--Projects that are being discussed and may be pursued in the future if funding and support is available.

LEADING BY DOING

Because of its charter and visibility, EPA should take the lead in pollution prevention (P2) activities. By getting its "own house in order", EPA will act as a model to other organizations and agencies. Many programs suggested similar activities which have been consolidated here. These suggestions are ones that the whole region could undertake to reduce the sources of pollution within our own agency and to encourage practices that are less environmentally damaging. Ongoing and potential "housekeeping" activities include:

ONGOING POLLUTION PREVENTION ACTIVITIES:

PAPER

- Continue the Region's successful recycling program for paper (various grades), aluminum, and glass.
- Use recycled paper in all copy machines within the Region.
- Double-side all print jobs going through the copy center or completed on walk-up machines.
- Use both sides of paper before tossing in recycling bin.

TRANSPORTATION

- Encourage car pooling by utilizing ride share information on the Local Area Network (LAN).

OTHER

- Include a P2 section in 10 Times with a section on the best current P2 activities.
- Use electronic communications instead of hard copy communications whenever possible.

POTENTIAL POLLUTION PREVENTION PROJECTS:

PAPER

- Transmit Regional messages through WordPerfect Office (WPO) as much as possible, instead of distributing hard copies. This would include individual correspondence, as well as meeting notices and messages sent to groups.

- Use unbleached paper in all copy machines within the Region.

- Put up bulletin boards on each floor for branch messages or placement of 10 Times and other notices that can't be put on the LAN.

- Re-use blank sheets that come out of the xerox and Local Area Network (LAN) printers instead of recycling them.

- Create scratch pads (full and half size dimensions) from the clean reverse side of non-confidential draft sheets. Using a glue stick, the small scratch pads could be converted into pseudo-Post-It Notes.

TRANSPORTATION

- Institute compressed work weeks with four, 10 hour days.

- Purchase fuel efficient, smaller cars for government use. Try to utilize mass transit whenever possible, especially to meetings downtown.

- Subsidize bus ridership through use of government subsidies to EPA employees.

BUILDING

- Install Green Lights energy efficient lighting systems wherever feasible in EPA Region 10 facilities.

- Turn off machines and lights when leaving the building in the evening, especially on Friday afternoons.

- Investigate the feasibility of rewiring lighting circuits so that entire banks do not have to be all on or all off. In many instances, lighting remains on whether or not employees occupy a space. This individualized lighting would allow for motion detector units to be utilized and/or make it possible for individuals to choose natural lighting when it is sufficient.

OTHER

- Sponsor a P2 suggestion contest through WPO.

- Publicize successful P2 projects.

- Eliminate banners from print requests.

OFFICE OF EXTERNAL AFFAIRS

ROLE/DEFINITION:

The Office of External Affairs (OEA) staff will continue to use every opportunity to emphasize and promote pollution prevention through educational and outreach efforts. Speeches, booklets, news releases, and educational kits are just some of the ways OEA gets the P2 message out to the public, businesses, and agencies.

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Write speeches stressing P2 for delivery by the RA/DRA, and others.
- Provide speakers on the topic of P2 for community groups and schools.
- Include the P2 message in news releases.
- Distribute booklets and brochures on P2 through the Public Information Center, many to teachers in the four state area.
- Participate on the Region's pollution prevention committee (the OEA Director is a member).

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Add P2 message to letters in response to citizen requests to the Public Information Center (PIC).
- Investigate the possibility of beginning a Region 10 Regional Administrator's Pollution Prevention Award Program to recognize innovations of businesses, communities/civic organizations, state agencies, and other possible categories.
- Work with the P2 staff and committee to create a series of bookmarks with P2 statistics or ideas; release them on a quarterly basis, and provide them to staff for enclosure with their letters and to the PIC to add to kits and request orders.
- Develop P2 kits for distribution from the PIC to businesses, educators, and local government target groups.

- Review congressional letters to add a pollution prevention tone/message when appropriate.

- Work with the programs to ensure that the PIC receives copies of all P2 information.

- Solicit specific P2 information from program offices and utilize members of the Pollution Prevention Steering Committee as P2 contacts for each office.

- Work with state education (public instruction) and environmental agencies to increase P2 education/information dissemination.

- Develop and begin implementing a plan for a statewide environmental education clearinghouse, under the planned pollution prevention grant to the WA Department of Ecology (Ecology). Work with Ecology, other state, federal and local resource/education agencies, business/industry, and community organizations.

POTENTIAL POLLUTION PREVENTION PROJECTS:

- Develop a generic P2 speech for RA/DRA and staff use with tailored/targeted additions for specific public sector audiences.

- Incorporate P2 information into congressional affairs and media training.

- Develop an internal EPA innovative P2 effort. Each month on a rotating schedule, a different group would be responsible for putting forth an "Idea Of The Month". The means of transmitting the idea to staff would be wide open (all staff meetings, posters, brown bag, computer message, etc). At the end of one year, the RA would recognize a group for its outstanding idea and/or action.

- Work with the Information Services staff to occasionally add a computer message on P2 to the mail messages and/or login user information.

- Develop a P2 one-line message (maybe through sponsoring an internal contest) to add to the bottom of all letterhead(s) used by the Region.

OFFICE OF REGIONAL COUNSEL/OFFICE OF ENFORCEMENT

ROLE/DEFINITION:

Pollution Prevention is an important concept and activity, one which the Office of Regional Counsel (ORC) and the Office of Enforcement (OE) strongly support. ORC's and OE's roles in P2 are unique; ORC's role consists primarily of legal support (complementing a program's determination of technical feasibility), while OE acts as a policy advocate to support P2 activities.

ORC has been involved in P2 activities for a number of years. Involvement to date generally has been to incorporate supplemental environmental projects (SEPs) into settlement agreements (these are usually referred to as "Consent Agreement and Consent Orders" [CACOs] for administrative cases and "Consent Decrees" for judicial cases). Boilerplate or standard language has been developed and is used on a routine basis for Toxic Substances Control Act (TSCA) cases and Emergency Planning and Community Right-To-Know Act (EPCRA) cases involving SEPs.

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Support and strongly encourage the program clients to include, as appropriate, P2 projects in settlement of judicial and administrative enforcement actions. P2 projects could be included either as SEPs or as a means of achieving compliance.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Expand use of SEPs in enforcement actions citing lower project costs as an incentive for penalty mitigation.

- Assist program divisions in incorporating P2 action plans into case settlements, when appropriate.

- Encourage coordination of P2 activities incorporated in enforcement actions with state supported P2 projects and ensure that they are consistent. For example, state contacts may be consulted for advice regarding possible P2 actions at a particular facility. In turn, EPA may be able to provide suggestions to the state. It is important that EPA does not give credit for a project that a facility is required to do under state provisions or one for which the facility has already received credit.

- Combine actions of ORC and OE to encourage better coordination among all media to ensure awareness of potential P2 projects involving the same facility.

- Actively inform the regulated community of P2 possibilities and incorporate P2 activities in settlements, whenever appropriate.

- Recognize P2 activities and incorporate them into enforcement actions, consistent with the "Policy on Use of Supplemental Enforcement Projects in EPA Settlements (Feb 12, 1991), the "Interim Policy on the Inclusion of Pollution Prevention and Recycling Provisions in Enforcement Settlements" (Feb 25, 1991), and the penalty policies.

- Require, to the fullest extent possible, that documents and reports submitted to EPA be double-sided and printed on recycled paper as part of settlement. Although this may not be an enforceable element of a settlement agreement, it hopefully will encourage the respondent or defendant to "re-think" his or her practices.

- Encourage press coverage of enforcement action involving extraordinary P2 activities. The press office will be informed of settlements involving significant pollution prevention actions or SEPs.

- Provide copies of settlement agreements involving P2 to OE and the regional Pollution Prevention office.

- Identify within the litigation report the possibility for P2 as injunctive relief or penalty mitigation SEPs when referring a case to the Department of Justice or to EPA Headquarters in the future.

MANAGEMENT DIVISION

ROLE/DEFINITION:

Because Management Division provides a broad spectrum of services and currently houses the Pollution Prevention Team, it has two distinct P2 roles: administration of the cross-media program, and integration/incorporation of the ethic into the Division's products and services.

The Pollution Prevention Team (housed in Policy, Planning, and Evaluation Branch) will provide support for National, Regional, State, and Tribal P2 efforts; work to broaden participation in P2 programs; and facilitate cross-media communication. The P2 Team will provide P2 training, outreach, grant and special projects administration. PP&E will integrate P2 into the Branch's analysis and cross-cutting programs, including accountability measures, environmental indicators, State EPA Agreements, economic analyses and strategic planning.

The Human Resources Branch (HRB) will develop pollution prevention incentives for employees and incorporate P2 training into employee orientations.

The Administrative Management Branch (AMB) will prevent pollution by "Not Buying Garbage". AMB will buy durable goods, recyclable and recycled goods, and those products whose production and use minimize environmental impacts, whenever feasible. The Comptroller Branch will also work to reduce the amount of resources the Region uses by reducing unnecessary forms, paper usage, etc.

Information Management Branch (IMB) will prevent pollution by streamlining administrative procedures and minimizing paperwork or usage. IMB will also have a role in developing new work processes and providing automation to prevent pollution. IMB will promote the use of telecommunications, to reduce the use of paper and the need for travel.

POLICY PLANNING AND EVALUATION BRANCH

ONGOING POLLUTION PREVENTION ACTIVITIES:

POLLUTION PREVENTION PROGRAM MANAGEMENT

- Work towards shaping National and Region 10 P2 programs.
- Coordinate the activities of the Pollution Prevention Steering Committee, comprised of managers from all Regional program areas. The Steering Committee acts not only as an advisory group, but also helps to implement P2 activities within each member's program/media area.
- "Market" pollution prevention through broadened participation in P2 activities across media and program lines and at federal and state/tribal levels. State, tribal, and federal programs/people that have not previously been involved are being encouraged to participate in P2 programs. In the Region, over 20 Branch-by-Branch P2 training sessions have been given.
- Oversee the National Pollution Prevention Incentives to States (PPIS) grants process and administer eight Regional PPIS grants ($970,000), five of which target risk reduction and pollution prevention (R2P2).
- Work on broadening participation in P2 activities across media and program lines, at federal and state/tribal levels. Provide P2 training as required. Conduct P2 outreach efforts.

SPECIAL PROJECTS

- Oversee the Stillaguamish Water Conservation Program, which reduces water usage and health risk through water conservation.

- Actively participate in the Region's three Two Percent set-aside projects, (Pollution Prevention Environmental Education K-12 Curriculum, NW P2 Research Center, and the Agricultural Chemicals Project).

INDUSTRIAL SECTOR

- Work with industry (including agriculture) to encourage multi-media P2 activities even though assistance to industry is, for the most part, provided by the states and the Region's RCRA and Toxics programs. The P2 Team recommends use of the Pollution Prevention Information Clearinghouse (PPIC); assists with waste minimization, recycling/procurement and waste exchange efforts; and encourages business participation in the Green Lights Program.

CONSUMER SECTOR

- Encourage P2 among consumers by sponsoring community recycling events: "Goodwill Games Recycling"; KIRO Plastics Recycling event; Recycling on Washington State Ferries. Also work with local media to promote prevention and recycling; write P2 speeches for RA/DRA use; and present P2 talks to professional, community organizations and classrooms.

- Support community recycling projects. Make P2 presentations and conduct outreach as requested.

FEDERAL SECTOR

- Work with the Solid Waste Program to institute recycling programs at Federal Facilities (Henry M. Jackson Building, Federal Center South and a Bothel Post Office) and with the local Federal Executive Board (FEB) to promote government procurement of recycled materials.

ENERGY AND TRANSPORTATION SECTORS

- Serve as Region 10 Green Lights Coordinator to promote energy sector issues. Duties include organizing meetings, disseminating information to potential partners and allies, and writing and giving Green Lights presentations. Region 10 hosted the first regional Green Lights Conference.

- Assist the Region's Toxics staff, Headquarters, the states of Oregon and Washington, and the Bonneville Power Administration to assure that polychlorinated biphenyls (PCBs) are disposed of properly as fluorescent lights and pre-1978 light ballasts are retrofitted.

- Cooperate with the Human Resources Council to establish a program that would increase Region 10 employee use of mass transit systems.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

POLLUTION PREVENTION PROGRAM MANAGEMENT

- Develop and incorporate section on P2 into inspector training.

- Oversee the 1992 P2 grant processes.

SPECIAL PROJECTS

- Oversee the pulp and paper P2 pilot project which involves three parts--the development of a model P2 plan for Simpson-Tacoma Kraft Company's facility, a plan to request P2 projects such as facility audits as part of enforcement actions, and a project to influence a segment of the industry through voluntary and/or market means.

INDUSTRIAL SECTOR

- Serve as Regional Contact for the 1992 Administrator's Award for Pollution Prevention.

- Investigate public-private partnership options to facilitate proper disposal of PCB containing light ballasts associated with Green Lights relamping.

CONSUMER SECTOR

- Co-sponsor a Green Lights/Earth Day/Energy Conservation project with Washington State and Seattle and Shoreline School Districts.

FEDERAL SECTOR

- Work with the U.S. Postal Service (regionally) to publicize innovative P2 projects being undertaken by the Postal Service.

ENERGY AND TRANSPORTATION

- Initiate Green Lights relamping of Manchester Laboratory.

- Promote adoption of an EPA Region 10 program to encourage Mass Transit Ridership through public transit subsidies and other means.

INCORPORATING POLLUTION PREVENTION INTO OTHER PP&E PRODUCTS:

STRATEGIC PLANNING/RISK REDUCTION

- Emphasize P2 as a major objective in the current (FY94-97) round of strategic planning.
- Incorporate Pollution Prevention Action Plans into future strategic plans.
- Assist in follow up and implementation of the many prevention-oriented activities in the FY92-95 and FY93-96 strategic plans.
- Study better ways of integrating risk management into state and federal P2 programs, and attempt to implement ways of better integrating the two programs.

STATE EPA AGREEMENTS (SEAs)

- Support the Alaska Department of Conservation's plan for the development of a "non-regulatory multi-media Pollution Prevention Program" in its FY92 SEA. Encourage the inclusion of similar plans in the SEAs of the other three states in our Region.

ENVIRONMENTAL INDICATORS

- Request that programs and cross-program teams develop measures of P2 which indicate the degree to which 1) routine work or existing initiatives prevent pollution; and 2) special Regional P2 initiatives prevent pollution.

REGIONAL ACCOUNTABILITY SYSTEMS

- Incorporate P2 initiatives in the Region's accountability and quality measurement systems.

ADMINISTRATIVE MANAGEMENT BRANCH

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Consolidate purchase requests from various originators so that only one order is issued to any given vendor. This reduces paper passed, labor expended, and packaging used by the shipper.

- Re-use manila file folders for purchasing records from year to year (many other offices purchase new supplies each time they re-organize their files.)

- Purchase and install bulletin boards on each floor of the Regional office so that one note can be posted there rather than notes sent to each Branch or each employee.

- Purchase recycled paper for use in all copiers.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Encourage General Services Administration (GSA) to stock more recycled products or those that are the least environmentally damaging.

- Reduce paperwork in processing Procurement Request forms.

- Install a header message on the LAN car reservation schedule reminding requestors that they should consider walking or riding free on Metro for downtown meetings and encouraging them to use bus tickets (available from the Service Center) to travel to meetings near downtown (e.g., the University of Washington).

POTENTIAL POLLUTION PREVENTION PROJECTS:

- Submit a suggestion to the Comptroller Branch that, as a matter of policy, those employees who are fully Superfund funded need not type a Superfund justification to attach to their Travel Authorization.

- Provide only those supplies that pollute less than their more disposable, "high tech" cousins. (e.g., reusable ball point pens with refills rather than expensive, disposable microball pens.)

- Discuss with Regional managers their commitment to support the procurement of items that are similar to, but not identical to their stated parameters (i.e., do the users really require yellow note pads with perforations at the top of each page--an open market purchase--rather than white pads without perforations--maybe made from recycled paper?).

- Prepare a letter to GSA stipulating that GSA honor 40 Code of Federal Regulation (CFR) Part 253, 53 FT 46558 and look into specifying the purchase of retread tires for use on all GSA vehicles assigned to Region 10's motor pool.

- Request that Building Management provide additional bike racks inside the parking garage so that employees will be encouraged to ride to work.

COMPTROLLER BRANCH

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Notified Diner's Club to stop sending reports which were never used (they were being shredded and recycled). Diner's Club was asked only to send those notices that were necessary.

- Institute the use of automatic teller machines for cash advances to travelers. This change will reduce paperwork and save employee time.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Use WPO to distribute E-Mail received from Headquarters (HQ) more effectively. One person will read E-Mail each day, send copies into a file, edit the file as necessary and send it to the appropriate parties instead of everyone receiving hard copies of messages not intended for them. This initiative will enable staff to scan, read, and delete their E-Mail.

- Purchase a page printer, so that staff can print needed pages instead of automatic, whole report printouts.

POTENTIAL POLLUTION PREVENTION PROJECTS:

- Reduce the number of reports received, by asking our HQ counterparts to be more selective.

- Request monthly reports only on microfiche instead of through the computer. This initiative will save paper and storage space.

- Eliminate actual timecards, travel vouchers, etc. Introduce automated systems, so that this information can be transmitted and accessed electronically.

HUMAN RESOURCES BRANCH

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Evaluate applicants using a single documentation form instead of many forms.

- Combine, shorten, and simplify tracking forms, and where possible, place them on automated systems.

- Prepare to automate the entire applicant evaluation process used for hiring new employees.

The use of the three changes above in the application process will reduce paperwork by 25 percent.

- Use a single page promotion application instead of the typical 10 page form; will lead to a 90 percent reduction in paperwork.

- Use a standard, single page position description; will lead to a 75-80 percent reduction in paperwork.

- Use short, to-the-point regional orders on merit staffing, delegation of position classification authority, incentive awards, career tracks, compressed work schedules, extended leave, standby pay, orientation, and visits by regional experts. Possibility of automating these processes in the future.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Install an electronic bulletin board for HRB subjects.

- Utilize open continuous announcements for recurring vacancies under delegated authority.

- Discuss P2 as an employee orientation topic and during college/university recruitment visits.

- Use P2 as a possible source for an incentive award.

INFORMATION MANAGEMENT BRANCH

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Deliver an extremely popular electronic messaging system (WordPerfect Office) which many offices cite as a method of saving time and paper. In particular, IMB has become the only EPA office to use WPO to communicate to some of its remote sites. This saves enormous numbers of FAX and express mailings as well as an occasional trip.

- Work jointly with HRB to develop a new Performance Agreement form which could be stored electronically on WordPerfect. This new, simple form saves repeated printings which used to occur with the older form.

- Recycle outdated XT-style computers instead of discarding them; IMB has been able to use them as "communications gateways" thus extending the life of otherwise surplus equipment.

- Placed the regional phone book on the LAN (Local Area Network) to reduce the number of interim printings during frequent office moves. An up-to-date printed version is available in the mail room on an "as-requested" basis.

- Led the effort to use recycled paper for computer and word processing output.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Emphasize, during the State/EPA Data Management Grant process, projects that will give credit to applicants who can show a P2 benefit to their application.

- Promote simplified forms which can be completed with word processing; this will allow reviews and changes without retyping and will reduce greatly the amount of time necessary to complete the form.

- Remove the older-technology Wang systems and replace them with LAN workstations. New workstations use updated electronics and use considerably less power. Inform users of the trade-offs involved in turning off computers when not in use.

POTENTIAL POLLUTION PREVENTION PROJECTS:

- Deliver new LAN workstations so that the desired 1-to-1 Personal Computer (PC) to staff ratio exists. With full availability there are many opportunities to reduce paper usage in favor of electronic transmissions including regional bulletin boards, all employee memos, and so on (note that some of these methods are already in use).

- Reduce "traditional" computer printouts originating in our national computer center in North Carolina which produce many pages of unnecessary information. Although not a trivial exercise, it is certainly technically feasible to reduce this wasteful practice. IMB would like to at least price out the cost of solving this problem.

- Volunteer to chair the Federal Executive Board Intermediate Remedial Measures (IRM) subcommittee, in order to transfer P2 ideas to other federal agencies in the Seattle area.

- Develop a form response which asks senders to either remove EPA from their "junk mail" lists or to use less wasteful advertising.

- Set up a P2 display for the Library and look into having the library distribute P2 packets.

- Eliminate the printing of job descriptions by placing all Region 10 job descriptions on the LAN. This project would be developed in conjunction with HRB (see page 24).

- Investigate how to reduce the "adminis-trivia" that is associated with each Freedom of Information Act (FOIA) request, perhaps through less formal and more electronic responses.

- Develop graphic displays for the Pollution Prevention Office by the Graphics Department.

ENVIRONMENTAL SERVICES DIVISION

ROLE/DEFINITION:

The Regional Quality Assurance Management Branch (QA) has prepared an aggressive pollution prevention plan that deals with all facets of QA functions. Branch employees are asked to recognize and correct situations where the management of materials and/or resources causes unnecessary waste that results in the release of pollutants to the environment.

While the Ambient Monitoring and Analysis Branch works, for the most part, to lend technical support to the three Media Divisions, there are opportunities for the Branch to contribute to a Regional P2 effort. The Branch can contribute to preventing pollution by providing education and technical information, quantifying prevention activities, and combining multi-media environmental information into the Geographical Information System (GIS) and promoting this important new product.

The Technical Support Branch conducts two types of activities that have special relevance to P2: facility inspections and technology assessments.

The Manchester Laboratory continuously searches for practices and procedures to reduce or eliminate the generation of hazardous wastes in the analytical methods performed. Laboratory employees voluntarily recycle paper and aluminum products utilizing WA State Department of Ecology staff to transport these materials to the recycling center. The Lab also periodically reviews its environmental compliance activities at the laboratory complex to ensure that it not only meets federal, state, and local environmental laws, but that it minimizes the potential for spills and accidental releases into the environment.

QUALITY ASSURANCE MANAGEMENT BRANCH

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Consider during the review, comment, and approval stages of site-specific Quality Assurance Project Plans, the recommendation of appropriate promulgated analytical methodologies and/or standard operating procedures that produce less solvent waste for all environmental monitoring efforts.

- Recognize, document, and bring to the attention of the appropriate persons, poor housekeeping or wasteful practices that cause the production of unnecessary pollution during laboratory and/or field auditing activities.

- Note laboratory requests for the distribution of Performance Evaluation Samples that consist of less than normal "batch" volumes, with distributors being asked to send only requested samples.

AMBIENT MONITORING AND ANALYSIS BRANCH

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Use Geographic Information Systems (GIS) to combine multi-media program information including Superfund Amendments and Reauthorization Act (SARA) Title III, RCRA, Groundwater, Superfund, National Pollution Discharge Elimination System (NPDES), and other data themes into informative mapping displays. The use of GIS will make complex environmental information more readily available to environmental decision makers and the public. A better informed public will increase environmental awareness and help to prevent pollution at the planning stage.

- Assist in environmental monitoring for Stream Walks (see page 32 for program description).

POTENTIAL POLLUTION PREVENTION PROJECTS:

- Enlist the technical expertise of Branch scientists and engineers to help agency representatives and the public make educated judgements about new technologies.

- Help to measure P2 progress by assisting in the development of Environmental Indicators.

TECHNICAL SUPPORT BRANCH

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Evaluate existing P2 brochures and publications as to their appropriateness for distribution during facility inspections.

- Investigate the availability, cost, and feasibility of training inspectors to recognize and document P2 opportunities at inspected facilities.

- Provide technical assistance to regional programs, on an as-requested basis, to evaluate technical aspects of P2 settlements.

POTENTIAL POLLUTION PREVENTION PROJECTS:

- Conduct facility inspections as part of regional enforcement of federal environmental statutes. Inspectors might be able to carry generic, published information on P2 or waste minimization for distribution to facility managers. Inspectors might also, if properly trained, be able to take note of potential opportunities for P2 at the facilities they inspect, and make these observations a part of the inspection report. Such information could then be used in case development and negotiations, in order to encourage the incorporation of P2 measures into settlements.

- Assist regional programs in evaluating control or treatment technologies for efficacy or compliance with regulatory standards. As the use of P2 in case settlements becomes more widespread, technical expertise may be needed for evaluating proposed process changes, materials substitutions and the like, for their ability to actually deliver P2 benefits.

MANCHESTER ENVIRONMENTAL LABORATORY

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Eliminate some analytical tests from the methods performed (e.g., Chemical Oxygen Demand) and use micro-techniques for other methods. Initiate a computer tracking system to flag samples that need to be saved for disposal as hazardous waste.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Test supercritical fluid extraction unit and methods in order to significantly reduce the amount of solvents used during the extraction processes for organic compounds.
- Install a new 10,000 gallon underground fuel oil tank to replace an old tank that does not have leak detection and monitoring instruments.
- Install a new corrosive neutralization vault and tanks to properly neutralize acids and bases before this type of waste is discharged to the Kitsap County sewer line. The current acid neutralization system is not fitted with pH and monitoring instruments that are needed to monitor the acid discharge wastes.

POTENTIAL POLLUTION PREVENTION PROJECTS:

- Install an uninterruptible power supply to eliminate duplication of analyses whenever there is a power failure and thus reduce the amount of chemicals used and waste generated.
- Review continuously any proposed new methods to insure less toxic chemicals are used, when possible, in analytical methods.
- Promote and participate in Total Quality Management (TQM) projects that will improve the quality and timeliness of the analytical processes.

WATER DIVISION

ROLE/DEFINITION:

The following pages present the major components of the Water Division's Pollution Prevention Strategy, focusing on efforts that would be substantially expanded or improved during FY92.

The Environmental Evaluation Branch (EEB) houses the 404 Program under the Clean Water Act; its activities are directed toward preventing the degradation of waters of the United States with a special emphasis on wetlands and management of dredged materials.

The Nonpoint Source Section is by nature a pollution prevention program. Because of the diverse and diffuse sources of pollutants, the greatest change must come from the will of the people to effect a change. Each person is a potential contributor of small amounts of pollutants in each of his/her many roles in a day and over the course of time. Those who are outraged about pesticides may not realize or consider important the cumulative pints (or even gallons) of oil their personal auto contributes to urban runoff to local streams and lakes via storm sewers.

The Municipal Facilities Branch (MFB) is responsible for assisting states in developing Municipal Water Pollution Prevention (MWPP) programs. The goal of MWPP programs is to get communities to remain in compliance with their National Pollutant Discharge Elimination System (NPDES) permits by doing "business in a different manner".

Within the Water Permits and Compliance Branch, P2 can be integrated into NPDES permits by using best technology and management practices to achieve the elimination and reduction of pollutant discharges.

The focus of the Groundwater Protection Program is to work with states and local governments to develop and implement programs and activities to prevent contamination of groundwater from both point and nonpoint sources.

ENVIRONMENTAL EVALUATION BRANCH

ONGOING POLLUTION PREVENTION ACTIVITIES:

PLANNING ASSISTANCE

- Regulate the disposal and evaluate alternatives for dredged material into waters of the United States, based on chemical and biological data.

- Provide grant funding to the State of Washington to develop water quality standards for wetlands, which will provide for additional protection of wetland resources.

- Provide financial and technical assistance to state and local governments for wetlands inventories, wetlands protection planning, and technical studies concerning wetland functions and values. For example, a grant was given to the state of Oregon to develop a state wetland conservation plan in FY91-92.

- Designate open-water disposal sites based on sediment testing under the 230.80 process.

- Provide the link between various programs within EPA (such as Superfund) to support consistent sediment management within Region 10.

- Participate and evaluate the Procedures and Management Plan Work Group for the Grays Harbor and Willapa Dredged Material Management Special Study. This multi-agency study will culminate in a formalized process for characterizing and managing dredged material in Grays Harbor and Willapa Bay, similar to the process used in Puget Sound (the Puget Sound Dredged Disposal Analysis).

REGULATORY ACTIVITIES

- Stress avoidance of wetland degradation in our review of projects proposed for permitting under Section 404 of the Clean Water Act (CWA). The goal is to achieve no net loss in the short term and a net gain for wetlands in the long term. In those cases where some wetland fill is allowed, continue to insist on wetland mitigation which provides for at least a one-for-one replacement of wetland functions and values and long-term protection of the restored or created wetland.

- Incorporate P2 elements into settlement agreements with violators. These elements include the long term protection of wetland and riparian areas, public education, and development of wetland protection plans.

- Approve disposal of dredged materials into open-water sites based on the Puget Sound Dredged Disposal Analysis (PSDDA) using chemical analysis of contaminants and bioassay results.

- Evaluate and design confined disposal sites when open-water disposal is not allowable. These management principles and evaluation methods developed by PSDDA form the technical and policy basis for dredged material management throughout the Region. Work towards a consistent sediment management program with Army Corps of Engineer Districts and States.

EDUCATION

- Develop a public outreach strategy to assist the public in understanding the values of wetlands in order to obtain support for wetland protection efforts (both public and private). Fund the development of educational materials, participate in wetlands workshops, and speak in public forums concerning wetland and sediment issues.

NONPOINT SOURCE SECTION

ONGOING POLLUTION PREVENTION ACTIVITIES:

319 GRANTS TO STATES

- Assist with 76 projects, with four states and one tribe, funded through FY90 and FY91 funds. A planning meeting is held each September to improve communication between the states and EPA and to develop goals and objectives for the next fiscal year. Each November there is a Nonpoint Source (NPS) Workshop, for states' NPS Coordinators and invited agency representatives, which focuses on information sharing and technology transfer.

AGRICULTURAL CHEMICAL MANAGEMENT

- Submitted, with the help of a 3-state advisory committee representing interested and affected organizations, agencies, and groups, 23 proposals with five (four agriculture and one urban) proposals selected for funding. Grants totalling $210,000 have all been officially awarded under this Two Percent Project.

URBAN PESTICIDES INITIATIVE

- Work with the Pesticides Section on a joint pilot project (see page 43 for project description).

CITIZEN MONITORING AND STREAM WALK

- Work with 13,000 students, teachers, and members of local organizations who are actively involved in the Stream Walk program. This program consists of a set of easily measured physical characteristics and a simple guide and form that citizens can understand and use. There is excited interest because groups can become involved and because the data will be collected and used by EPA and by the states.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

COLVILLE CONFEDERATED TRIBES

- Prepared a Nonpoint Source Assessment and Management Plan. A 319 grant has been awarded to assist the tribes in implementing the Management Program. This will bring resources and solutions to a significant number of people and land area. Technical assistance will be provided where requested.

MONITORING GUIDELINES WORKSHOPS

- Provide training on how to use an EPA/Center for Streamside Studies Monitoring Guidelines document and software; will help foresters and others better evaluate the impacts of Best Management Practices (BMPs) on streams in the Pacific Northwest and Alaska.

TECHNOLOGY TRANSFER CONFERENCES

- Involved in Regional Conference to assess the 319 project progress and share information results. Such sharing and networking can save time and redundancy and facilitate collaboration among groups involved with similar issues.

PUBLIC INVOLVEMENT AND EDUCATION

- Expand Stream Walk participation and adoption of local streams, and assistance to states in using the database program for reporting on the condition of its waters.

- Continue outreach to teachers to help them to develop or to adapt existing curricula for their classes and to develop meaningful on-the-ground projects for students.

- Assist corporations in developing environmental programs for employees or community organizations.

ANALYSIS OF CUMULATIVE IMPACTS METHODS AND STUDIES

- Work with Oregon State University to assemble the information and develop the methodology for predicting the probable impact of various proposed activities; this will be useful to decision-makers and to those who issue permits.

COLUMBIA RIVER FISH RESTORATION

- Support Columbia River Fish Restoration projects. Even though these are restoration projects, they carry an element of prevention. Once the

processes for restoration have been initiated, the actions prevent future pollution.

AGRICULTURAL CHEMICAL MANAGEMENT

- Participate in a planned Pollution Prevention Forum. The purpose is to bring together those individuals and groups working on P2 projects which have been funded with key EPA and state representatives to foster a dialogue and exchange of information.

- Expect to receive an additional $200,000 for FY92 Pollution Prevention projects. If appropriation is approved, a second call for proposals is planned following input from the Advisory Committee.

URBAN PESTICIDES ISSUES

- Participated in an Integrated Pest Management (IPM) Summit which was held on Dec. 17 - 18, 1991, to bring the urban IPM "players" and those concerned with urban pesticides issues in Washington state together, to provide technical information, updates, and a national perspective on IPM, to facilitate networking among people from regions within Washington and those with similar programs or concerns, and to assess the needs of IPM players to guide the development of their 1992 goals and objectives.

NONPOINT SOURCE PROGRAM/PROJECT TRACKING SYSTEM

- Hired a contractor to develop a tracking system for the 319 projects. With input from the state, should be able to reduce the 2-3 page quarterly reports to a short form initially, and eventually eliminate paper reports entirely (with submissions on disc).

POTENTIAL POLLUTION PREVENTION PROJECTS:

- Regulate and/or redefine nonpoint pollutants and pollution sources as part of the Nonpoint Source (319) Program. This provides considerable incentives to succeed in reducing/solving nonpoint source problems before costly regulations or litigation occur.

- Leverage the resources of other groups and agencies with available monies from the Pollution Prevention Through Agricultural Chemical Management, the Urban Pesticides Initiative, Stream Walk/Citizen Involvement, and 319 program to achieve common water quality goals. Much strength can be gained by developing ties with the local groups and institutions who have a vested interest in protecting their local resources.

MUNICIPAL FACILITIES BRANCH

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Use reusable cups instead of disposable cups.
- Recycle paper, aluminum cans, and glass.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Replace 5-gallon trash bins at employees desks with pint sized trash bins (a.k.a. "mini-bins") thus reducing the volume of solid waste generated at its source. Start with MFB and expand to include Water Division then all Region 10 offices.
- Prepare an educational and promotional guide on rethinking/reducing/ reusing/recycling to be distributed with mini-bins. If the project is expanded to all Region 10 divisions, will need to coordinate with the HRB regarding orientation for new employees.

MUNICIPAL WATER POLLUTION PREVENTION (MWPP) PROGRAM

The heart of MWPP programs is the technical evaluation of publicly owned treatment works (POTW). Are the existing facilities capable of handling the wastewater flows and organic loads that they must handle today as well as in the near future?

Instead of reacting to permit violations, MWPP programs help communities assess the capabilities of their wastewater treatment facilities and to initiate early actions to remain in compliance. States are also encouraged to rethink how they provide grants/loans and that such monies be for P2 projects, not pollution abatement or correction activities.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

MFB hopes to expand activities from Idaho and Washington into Alaska and Oregon by Spring/Summer 1992.

- Help Ecology write their draft MWPP program which includes an assessment of the POTWs' financial conditions, the wastewater treatment technical plant self evaluation, and source reduction. Still awaiting adoption of the plan by Ecology's upper management.

- Award $50,000 grant from EPA Headquarters to complete development of Ecology's program (e.g., statewide workshops).

- Start a MWPP program in Idaho using a work group comprised of representatives from industry, both large and small POTWs, a consulting firm, training facility, an outreach coordinator, and state and federal entities.

- Prepare presentation for the Annual Pacific Northwest Pollution Control Association (PNPCA) meeting in Portland, Oregon, on November 5, 1992.

WATER PERMITS & COMPLIANCE BRANCH

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Using Best Available Technology and Best Control Technology (BAT/BCT - 40 CFR 125, Subpart A) limits and Best Management Practices (BMP - 40 CFR 125, Subpart K) requirements successfully within NPDES permits to prevent pollution.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Develop appropriate standard language addressing BMPs for NPDES permits and fact sheets using existing permits and both the Clean Water Act and the Pollution Prevention Act as starting points.

- Obtain contractor support for the development of a promotional and training film on BMP practices within the context of BMP programs required of NPDES permittees.

- Keep an accessible list of new technology for industry and encourage source reduction from permittees.

POTENTIAL POLLUTION PREVENTION PROJECTS:

- Develop appropriate standard language for the application of BMP to all point-source pollutant discharges to waters of the U.S. (including storm waters); would facilitate the wide-spread use of BMPs by regulatory agencies and their permittees across the country. Such standard language would be required for both NPDES permits and supporting fact sheets.

OFFICE OF GROUND WATER

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Develop Wellhead Protection Programs (WHP) with state and local communities. A WHP is designed to protect a community's underground source of drinking water from multiple sources of contamination.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Award demonstration grants to communities to begin the development of WHP for their wellfields. These projects will not only assist these local communities in developing a WHP, but they will also assist the state in testing out aspects of the states WHP programs which are currently under development.

DRINKING WATER PROGRAMS BRANCH

NEW POLLUTION PREVENTION PROJECTS IN FY92:

UNDERGROUND INJECTION CONTROL PROGRAM

- Include waste minimization and P2 provisions into the "order" portions of administrative orders that are issued to cure compliance problems at injection wells.

- Include P2 language in any consent agreements that are negotiated with well operators.

- Require operators of injection wells that are being operated without authorization to obtain permits. Standardized permit application package includes a requirement to develop and submit for approval a waste minimization/P2 plan. Any operator closing an injection well may be required to develop and implement a waste minimization plan as part of the EPA-approved well closure plan.

AIR AND TOXICS DIVISION

INTRODUCTION:

The Air and Toxics Division comprises three diverse components: Air, Toxics, and Pesticides Programs. Because these three programs chiefly operate independently of one another, and also for the sake of clarity, the presentation of the Division's P2 Plan generally observes these programmatic lines. Thus, for each, there is a P2 Definition section, an Ongoing P2 Activities section, and a section on P2 Activities/Projects proposed for FY92 and FY93.

AIR AND RADIATION BRANCH

ROLE/DEFINITION:

Changes in processes, equipment, and practices that reduce releases prior to end-of-pipe constitute pollution prevention. An especially promising area for prevention is the many sources of air pollution from vents, leaks, and dust blown from storage piles ("fugitive" sources). These sources do not lend themselves to traditional end-of-pipe controls; also, such controls are often not cost effective.

ONGOING POLLUTION PREVENTION ACTIVITIES:

- Require "best available control technology" (BACT) in the prevention of significant deterioration (PSD) program to encourage sources to look at means of reducing emissions through prevention and to credit P2 as a valid control technique.

- Pursue intensive educational/outreach efforts through community groups, home-oriented organizations, and industry as on-going projects. Develop a course to help home builders and designers prevent indoor air problems in residential construction. Since radon and indoor air abatement is the responsibility of the individual, programs presently concentrate heavily on public education.

- Work on the many provisions of the **Clean Air Act Amendments (CAAA) of 1990** which promote source reduction practices. Following are examples of the provisions that the Air and Radiation Branch is currently working on:

    - **Title I of the CAAA** requires the states to submit new State Implementation Plans (SIP) for all areas that have failed to meet the National Ambient Air Quality Standards (NAAQS) for ozone,

carbon monoxide, and particulates. The CAAA mandate that these SIPs contain many strategies that constitute pollution prevention (e.g., woodstove curtailment programs and transportation control measures). Currently, there are 21 PM-10 (small particulates) Non-Attainment areas; 18 plans were due on 11/15/91, and 3 plans are due on 12/31/92.

- **Title II** mandates cleaner cars, buses, and trucks through stricter tailpipe standards (resulting from improved combustion, not necessarily from end-of-pipe controls) and innovative pollution prevention strategies such as better diagnostic systems, longer warranties, and cleaner fuels. The Air and Radiation Branch is promoting the adoption of these programs by state and local agencies.

- **Title III** regulates emissions of 189 hazardous air pollutants from a vast range of industries of varying sizes. Regulations currently being developed include such well known pollution prevention strategies as high pressure/low volume spray guns for paint.

- **Title IV** requires across-the-board cuts in sulfur dioxide emissions from power plants through an innovative, market-based, allowance trading system that encourages energy conservation, the use of low sulfur fuels, and other P2 strategies.

- **Title V** requires virtually all stationary sources of air pollution to obtain renewable operating permits. This will greatly enhance opportunities for disseminating information on P2 and even mandating pollution prevention. Permit fees will be based on pollutant emissions, thereby creating a strong incentive for industries to reduce emissions by process modifications.

- **Title VI** phases out most uses of chlorofluorocarbons (CFCs) and other stratospheric ozone depleting chemicals by 2001 and requires that only safe substitutes be used. Product substitution is a classic pollution prevention strategy.

- **Title VII** concentrates on enhanced enforcement capabilities, including compliance reporting and citizen suit provisions. Enforcement is an important component of any P2 strategy. The requirement to report all emissions will be a strong incentive to reduce pollution.

NEW POLLUTION PREVENTION PROJECTS IN FY92 and FY93:

- Seek to obtain enforceable commitments for one or two major industries to voluntarily reduce emissions of toxic air pollutants.
- Promote adoption of a building code in one state that requires prevention of harmful levels of radon in new home construction.
- Encourage P2 projects in guidance to states for FY93.
- Encourage permit authorities to review information in the P2 Information Clearinghouse, in addition to the Best Available Control Technology and Lowest Achievable Emission Rate (BACT/LAER) Clearinghouse. This would be done as part of the pollution prevention component to the Regional PSD/NSR Training Workshop for state and local agency permitting personnel.
- Award a grant to Oregon Department of Environmental Quality (DEQ) to develop a pilot program for labeling products which have lower potential for contributing to indoor air pollution.

TOXIC SUBSTANCES SECTION

ROLE/DEFINITION:

Pollution Prevention is the use of processes, practices, or products that:

- reduce or eliminate the generation, use and/or release of toxic chemicals and wastes; and
- protect natural resources through prevention of environmental releases.

ONGOING POLLUTION PREVENTION ACTIVITIES:

THE ASBESTOS PROGRAM

- Prevents exposures and educates school districts in the safe maintenance of asbestos to prevent exposures. The Asbestos Ban and Phase Out program eliminates or reduces products with asbestos-containing materials.

THE 33/50 (INDUSTRIAL TOXICS) PROGRAM

- Encourages facilities to commit to voluntary reductions of environmental releases of 17 specific chemicals by 33 percent in 1992 and 50 percent by

1995. This initiative also encourages overall facility planning which may result in more than 17 chemicals being reduced (since the changes in processes and/or practices may affect other toxic substances as well).

THE TOXICS RELEASE INVENTORY

- Assists the public by providing data on a facility's toxic substances:
  - promotes company self-awareness of toxic releases, thus encouraging companies to use P2, and
  - uses public pressure to encourage facilities to use P2 practices.

  Beginning calendar year 1991, companies are required to report P2 actions and plans for future years on the Toxic Releases Inventory (TRI) form. Pollution prevention speakers are being used during the TRI outreach efforts this spring.

THE PCB PROGRAM

- Removes polychlorinated biphenyls (PCBs) from use, which reduces exposure risk and potential environmental emergencies, promotes safer disposal of PCB materials, and incorporates early disposal of PCBs as a component of settlement agreements. The PCB program is educating the industries which participate in the Green Lights Program on the safe disposal of old fluorescent ballast capacitors.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- **Enforcement Flexibility:** Allow a wider range of pollution prevention activities to count as Environmentally Beneficial Expenditures (EBEs) in settlements of PCB, asbestos, Emergency Planning and Community Right-to-Know Act (EPCRA), or Core TSCA violations:
  - Use of EBEs in consent decrees. EBEs could include early disposal of PCBs, equipment replacement which results in decreased emissions, use of safer substitutes, internal environmental audit of the company's compliance status, etc.
  - Use of EBEs to conduct pollution prevention audits.
  - Use of EBEs across programs/media in settlements (e.g., allow a bona fide pollution prevention expenditure to count as credit against PCB penalty).

- Use of EBEs for research and development of pollution prevention methods.

- **Education:** Develop a simple brochure geared for a specific audience (such as school districts) which lists typical P2 opportunities and appropriate referrals. Use the existing mechanisms to distribute the brochures.

- **Pollution Prevention Training:** Determine minimum P2 training requirements so that the inspectors can make appropriate P2 referrals (a one page list of P2 referrals would be a very useful document). Much technical assistance is available through states, P2 research, information clearinghouses, independent technical assistance programs, P2 education, etc.

- **Incorporation of Pollution Prevention into Routine Program Activities:** Use opportunities available during routine program activities (such as inspections, outreach) to educate on safer alternatives:

  - Encourage replacement of asbestos with man-made mineral fibers, where appropriate.

  - Expand lead program to provide technical assistance on reducing exposure to lead (such as industrial lead paint substitutes).

- **Special Initiatives:** Expand use of TRI data to target certain industries or sectors for special P2 initiative.

- **Lead program**: Reduce lead exposure from different media by proposing to ban certain lead uses, and emphasize the proper handling and disposal of lead products which are now prohibited (such as lead in interior paint). New activities in FY92 will focus on providing technical assistance to the public.

PESTICIDES SECTION

ROLE/DEFINITION:

The Region 10 Pesticide Program has incorporated this definition of pollution prevention into its mission statement as follows:

> "Reduce risks of pesticides to human health and the environment by preventing inappropriate, unnecessary, and illegal releases of pesticides and ensuring safe application of legal pesticides when they are necessary."

ONGOING POLLUTION PREVENTION ACTIVITIES:

- **Urban Pesticide Initiative:** Prevent pollution from pesticides through education and training. Millions of pounds of pesticides are used nationally in urban and suburban settings, with little or no training for users, and little information beyond the pesticide label. Residential users are much more likely to apply pesticides at rates higher than allowed by the label, partly because of lack of training and oversight. This initiative will teach how to avoid pest problems, thereby avoiding the use of pesticides. It will teach integrated pest management techniques that minimize or eliminate the need for pesticides. As of December 1991, EPA has entered into agreements with five Washington State Agencies to help implement the initiative.

- **Certification and Training (C&T) Program:** Require that restricted use pesticide applicators and commercial applicators demonstrate their competence in safely by passing a test and receiving a certification. Region 10 has a special initiative underway to increase the effectiveness of these training programs by upgrading the training materials. EPA has funded or is in the process of funding five projects aimed at preventing pollution by training applicators in the safe use of pesticides.

- **Groundwater Protection Program:** Prevent the pesticides contamination of groundwater by modifying pesticide labels to allow the use of certain pesticides that are a threat to groundwater only in states that have developed a specific management plan aimed at preventing contamination of groundwater by that pesticide. Region 10 is actively in working with its states to develop groundwater protection programs.

- **Worker Protection Program:** Prevent illness or injury to farm workers from pesticides. Region 10 has been actively in helping states develop protection and training programs. EPA has funded four projects aimed at training farm workers directly.

NEW POLLUTION PREVENTION PROJECTS IN FY92 and FY93:

- **Regional Integrated Pest Management (IPM) Initiative:** Identified this initiative in our strategic plan, but not earmarked for funding until 1993 or beyond. It will be an effort to prevent pollution by promoting IPM.

- **Environmentally Sound Transport, Storage, and Disposal of Pesticides:** Identified in our strategic plan and will be a high priority when the transport, storage and disposal regulations are developed. The Region plans a strong education effort.

HAZARDOUS WASTE DIVISION

DEFINITION/ROLE:

The pollution prevention strategy in the Hazardous Waste Division describes efforts to stimulate the shift towards (voluntary) source reduction and is meant to work in tandem with the (regulatory) permitting, compliance, and cleanup programs that also prevent pollution. Hazardous waste regulations include cleanup and management requirements for facilities that generate waste streams. These laws, by their nature, prevent exposure and release of hazardous materials. In addition, these complex and strict laws create an economic incentive for generators to move towards innovative source reduction options.

This Division has placed source reduction/pollution prevention as the priority for hazardous waste management. There are significant opportunities for industry to reduce or prevent pollution at the source through cost effective changes in production, operation, and raw material use. Changes within the Office of Solid Waste and RCRA Reauthorization could influence the future activities of this Division.

WASTE MANAGEMENT BRANCH

ONGOING POLLUTION PREVENTION ACTIVITIES:

COMPLIANCE SECTION

- Develop and conduct staff training on waste minimization/pollution prevention.
- Develop an inspector checklist for compliance with waste minimization requirements.
- Include waste minimization planning requirements into enforcement actions with federal facilities.
- Use compliance staff to refer generators to source reduction technical assistance.

PERMITS SECTION

- Develop and conduct staff training on waste minimization/pollution prevention.

- Place waste minimization language into treatment, storage, and disposal operating permits.

- Request waste minimization plans for all permitted facilities and review these plans.

- Conduct a pilot program to review waste minimization programs in several pilot permitted facilities. This review process includes a P2 assessment and waste minimization "Program in Place" workshops with these facilities.

SOLID WASTE PROGRAM

- Provide grant funding for solid waste demonstration projects.

- Stimulate procurement and market aspects of recycled products in a variety of ways.

- Conduct source reduction and recycling outreach and limited technical assistance to states, federal agencies, local government, and businesses.

- Foster interstate communication and regional efforts for addressing solid waste issues.

- Assist technical capability development at the local, state, and federal level.

STATE PROGRAM TEAM

- Examine options in the State EPA Agreements to include waste minimization projects.

- Provide funding for the Northwest Regional Roundtable for Waste Reduction Programs, a group that meets quarterly to assist state pollution prevention program development.

HAZARDOUS WASTE POLICY OFFICE

- Coordinate P2 activities within the Hazardous Waste Division to promote source reduction.

- Promote Regional program development through the Northwest Regional Roundtable for waste reduction programs. The Roundtable is presently working on providing training opportunities.

- Establish the Pollution Prevention Research Center to stimulate applicable P2 research within the Region.

- Develop a Source Reduction Information Clearinghouse, an in-house technical assistance program which includes:

  (1) A Pollution Prevention Clearinghouse that is accessible to all programs through the library and LAN,

  (2) A technical information specialist to assist staff in locating technical information, and

  (3) Pollution Prevention Training on how to use the material in our various functions.

- Establish a Measurement Study Workgroup--a multi-sector group which will address national policy questions relating to measuring P2 success.

- Develop initiatives with federal facilities. One example includes Region 10 and Alaska Department of Conservation (ADEC) joining forces with the Office of Research and Development (ORD) Waste Reduction at Federal Sites program to conduct a P2 opportunities assessment at the Ketchikan Coast Guard Facility.

- Work with Department of Defense and Ecology to develop a Memorandum of Understanding which includes P2.

NEW POLLUTION PREVENTION PROJECTS IN FY92:

- Begin developing prevention opportunities within Superfund programs.

- Develop federal facilities initiatives in P2.

- Build on the existing RCRA momentum.

- Work with other divisions to promote P2 through source reduction.

SUPERFUND PROGRAM

- Develop methods for incorporating P2 into enforcement actions with operating facilities.

- Evaluate options for P2 resulting from emergency response activities and remedial actions through equipment cleaning operations and maintenance, and through contractor and EPA staff training.

- Develop P2 expertise with the Chemical Safety Audit program.

- Develop an outreach program for Local Emergency Planning Committees to further promote P2.

- Apply a prevention ethic to emergency response activities.

FEDERAL FACILITIES

- Evaluate and test options to require federal facilities to establish or improve facility-wide P2 programs through existing legal mechanisms (compliance agreements, consent orders, interagency agreements, etc.)

- Develop language to fit prevention requirements into consent orders.

- Work with the Policy Office to coordinate outreach activities with federal facilities.

RCRA PROGRAM

- Document success stories of inclusion of technical assistance within the inspection process.

- Document enforcement cases that require P2 programs through compliance actions.

- Review for effectiveness and apply "Program in Place" efforts at other permitted facilities.

- Examine P2 efforts at permitted facilities as required under Hazardous and Solid Waste Amendments (HSWA).

- Implement municipal solid waste pollution prevention activities (i.e., Northwest Regional Market Development Roundtable).

HAZARDOUS WASTE POLICY OFFICE

- Host a multi-media manager symposium to bring state and EPA program managers together to raise awareness of P2 in various media programs.

- Expand outreach efforts to assist federal facilities in developing and improving their P2 program.

- Support the Pollution Prevention Clearinghouse Center and develop a center for Region 10.

- Develop new training courses, as needed.

POLLUTION PREVENTION BARRIERS AND SUGGESTIONS

Many Divisions cited both general and specific barriers they faced when trying to implement pollution prevention activities. Some barriers exist because of legal restraints while others stem from a lack of resources to carry through on P2 projects. Some Divisions provided suggestions for ways to overcome these barriers. More effort needs to be put into clarifying barriers and developing practical strategies for overcoming them.

RESOURCE BARRIERS

- Lack of personnel to support P2 activities.
- Lack of resources for training (i.e., the cost of training inspectors for P2 involvement).
- Lack of resources to support innovative P2 pilot initiatives.
- Need to place a greater emphasis on P2 from small, non-point dischargers. If industrial point sources continue to be the focus, the Region will not achieve prevention at the agricultural or personal/consumer levels. Prevention of the "many small sources" of pollution that do not readily lend themselves to permit limits and regulation is central to the original intent of the program. FTEs and resources remain barriers to much needed P2 outreach to these sectors.

REGULATORY BARRIERS

- Lack of clear authority to require prevention activities.
- Current enforcement policy titled the "Interim Policy on the Inclusion of Pollution Prevention and Recycling Provisions in Enforcement Settlements" is difficult to understand and use.
- Negative legal implications of providing P2 materials during inspections.
- The present language describing the BMP program within the federal regulations for water pollution control (40 CFR 125, Subpart K, following on CWA 304(e) and 402(a)(1)) is narrowly focused on the potential spills of toxic and hazardous substances in ancillary activities of certain major industries. Agency guidelines (EPA 6/91; JGallup/EPA HQ, 8/19/88) follow the provisions of the regulations closely. The regulations for best management practices should be defined more broadly and brought up-to-date with the Congressional policies and Agency initiatives reflected in pollution prevention and elimination.

- Inflexibility in regulatory programs and lack of incentives to change.

- Regulatory disincentives for industry to take risks.

DISINCENTIVES TO REGIONAL RECYCLING

- Federal requirement that all monies resulting from the sales of recycled office products (i.e., government purchased paper) be returned directly to the Treasury Department does not provide an incentive to recycle and worse, causes recycling in the Region to be supported with personal monies. The harm of this is in evidence at the Manchester Laboratory where recycling is being curtailed because the individual transporting paper to the recycler cannot be reimbursed for gasoline expenses.

- The existing contract with the janitorial service is a disincentive to pollution prevention in that "garbage cans" are emptied and "recycling bins" are not. This should be revised so that recycling bins are also emptied regularly.