

BIENNIAL REPORT TO THE LEGISLATURE:

POLLUTION PREVENTION

AND

ENVIRONMENTAL ASSISTANCE



Vermont Agency of Natural Resources
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
JANUARY 1998

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&

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TABLE OF CONTENTS

INTRODUCTION	1
SECTION 1: TOXICS USE REDUCTION AND HAZARDOUS WASTE REDUCTION PLANS	2
SECTION 2: BUSINESS ASSISTANCE AND RECOGNITION PROGRAMS	7
SECTION 3: SOLID WASTE SOURCE REDUCTION, REUSE, AND RECYCLING INITIATIVES	11
SECTION 4: STATE GOVERNMENT INITIATIVES	13
SECTION 5: CONSUMER EDUCATION	17
SECTION 6: DEC COORDINATION	19
APPENDICES:	
APPENDIX A PUBLICATIONS	
APPENDIX B ENVIRONMENTAL ASSISTANCE DIVISION ORGANIZATIONAL CHART	
APPENDIX C ENVIRONMENTAL ASSISTANCE DIVISION BUDGET	
APPENDIX D COMPLIANCE STATUS OF PLANNING FACILITIES	

Introduction

This is the third biennial report of the Vermont Department of Environmental Conservation's (DEC) Pollution Prevention Program that implements the toxics use and hazardous waste reduction planning law for Vermont business and industry. This report also summarizes other program activities of the non-regulatory Environmental Assistance Division (EAD).

As the only non-regulatory division within the DEC, EAD manages activities different from other divisions within the Department. Formed in 1995 from the former Pollution Prevention Division and Recycling and Resource Conservation Section of the Solid Waste Division, EAD was expanded to include external coordinators of departmental functions, training staff, and permit specialists. The Environmental Assistance Division administers programs within two main functional areas:

Waste Prevention and Assistance

Staff in this area help state agencies, businesses, communities and individuals to identify effective and economical ways to reduce waste at the source or to recycle waste once generated in order to avoid waste treatment and disposal costs and to safeguard the environment. Staff provide the following services:

- ◆ technical information and assistance on pollution prevention and recycling technologies,
- ◆ oversee pollution prevention, recycling and composting pilot projects,
- ◆ administer recognition programs,
- ◆ operate the Small Business Compliance Assistance Program,
- ◆ oversee federal Toxics Release Inventory reporting requirements.

DEC Coordination

Staff in this area provide department-wide coordination services related to environmental permitting, policy and planning, compliance and enforcement, inspection programs, and management information systems. Permit specialists located in regional offices help people through the environmental permitting process, offering the general public a single point of access to DEC permitting and regulatory programs.

I. Pollution Prevention - Toxics Use and Hazardous Waste Reduction Planning

Background

In July 1993, 221 Vermont businesses developed their initial Pollution Prevention Plans as required for companies that generate more than 2,640 pounds per year of hazardous waste from their routine operations. Plans included identification of all hazardous wastes, an evaluation of pollution prevention opportunities, and an implementation schedule for those opportunities determined to be technically and economically feasible. Plans must be updated every three years to account for changing circumstances that might affect the feasibility of pollution prevention measures. The first plan updates were required in July 1996.

In administering the planning requirement, the Environmental Assistance Division emphasizes two key concepts. First, that companies give priority to source reduction opportunities in their Plans. When implemented, these source reduction measures will result in the reduction or elimination of hazardous waste *before* it is generated. The second concept is that implementation of any measure that results in the transfer of pollutants from one media to another, for example, from a hazardous waste stream to wastewater or to the air, is *not* pollution prevention. When these concepts can be successfully applied, companies are typically able to cut both costs and regulatory oversight.

Figure 1 shows the number of facilities subject to the planning requirement from 1992 through 1996. Up until 1995, the total is made up of the number of Class A generators of hazardous waste (>26,400 pounds/yr) plus the Class B generators (>2,640 pounds/yr). In 1996, facilities that were “Large Users of toxic substances” were required to plan for the first time. There were 49 manufacturers (SIC codes 20 - 39) that reported using more than 1,000 pounds/yr. of a listed toxic. However, 33 of these companies had already developed initial plans in 1993 as either a “Class A” or “Class B” generator of hazardous waste. The remaining 16 companies were new to the planning process as strictly “Large Users” and that is the increase in total facilities subject to planning that is reflected in Figure 1 for 1996.

Change in Pollution Prevention Planning Status of Companies Subject to Act 100

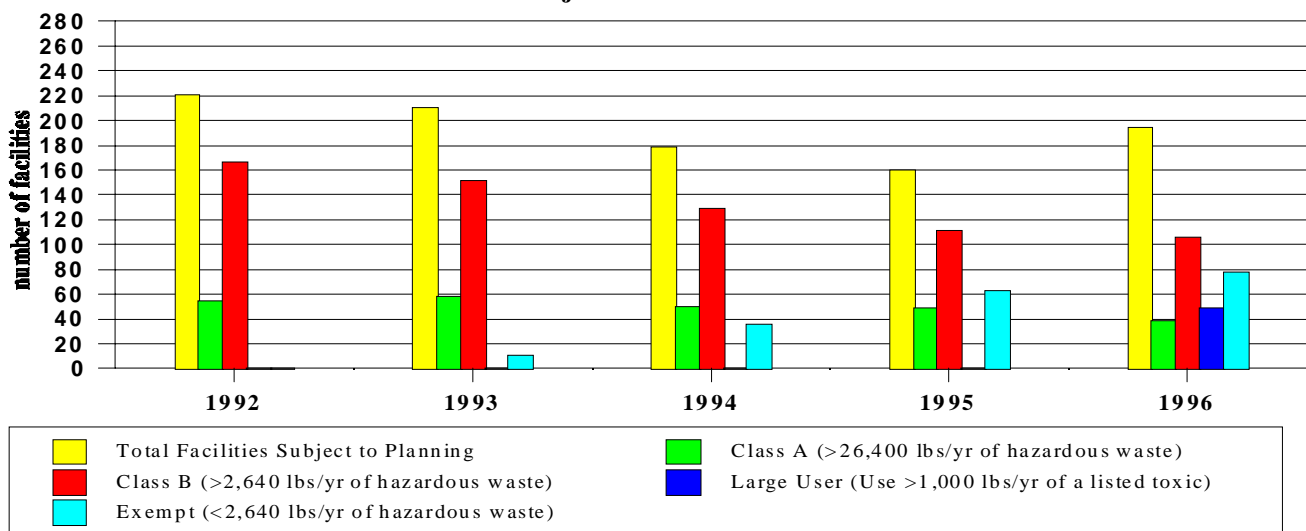
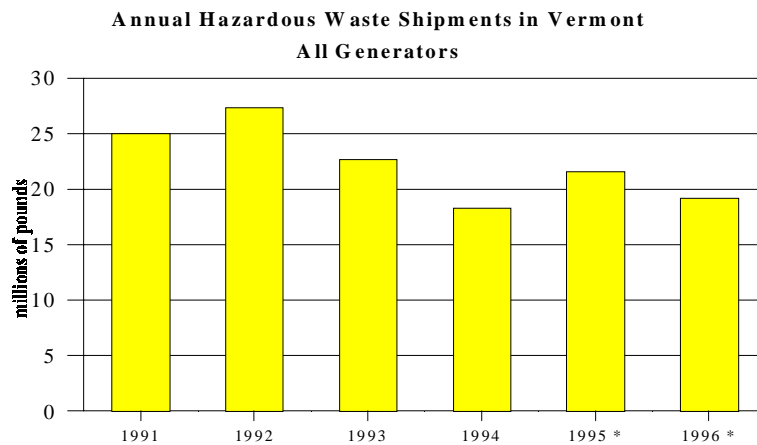


Figure 1.
 Source: Pollution Prevention Planners Database.
 Note: The “Large User” planning requirement did not take effect until July 1, 1996.

The number of Class A generators has declined from 55 in 1992 to 39 in 1996; for Class B generators the drop is from 166 to 106 over the same period. Perhaps most impressive, Figure 1 also shows the cumulative increase in the number of facilities that have dropped below the planning threshold of 2,640 pounds/yr of hazardous waste generation since the inception of the plan requirement. Not only does this situation exempt these 78 facilities from the plan requirement (provided they remain below the threshold), it also means that their regulatory status under Vermont's Hazardous Waste Management Regulations has changed from that of "generator" to "conditionally exempt generator". As the name implies, conditionally exempt generators (CEG) have considerably fewer hazardous waste requirements affecting their business.

Figure 2 illustrates a gradual decline in statewide hazardous waste generation of 20-25% since the inception of the planning law. Since these hazardous waste amounts can be influenced from year-to-year by many factors (e.g. changes in economic conditions, plant closings, major remediation or cleanup activities, etc.), only general conclusions can be drawn. Nevertheless, it is clear that the trend of year-to-year increases in hazardous waste generation of the 1980's has been reversed in the 90's.

Figure 2.
 Source: Vermont Hazardous Waste Manifest Data 1993 - 1996.
 * Data does not include remedial waste shipped from Johnson Controls site.



Progress in Industrial Pollution Prevention

Over half of Vermont companies exercised their option to retain their plans on-site and submit only the plan summary. All are required, however, to submit an Annual Progress Report which compares the "current" year's

hazardous waste generation with the previous year's generation. Where facilities were able to report a reduction for a given wastestream, **Figure 3** indicates the total amount of hazardous waste that was reduced from one year to the next since 1993. It also shows the amount of the yearly reductions attributable to the implementation of one or more pollution prevention measures. It is indeed noteworthy to see how much progress in reducing hazardous waste is tied to pollution prevention by companies.

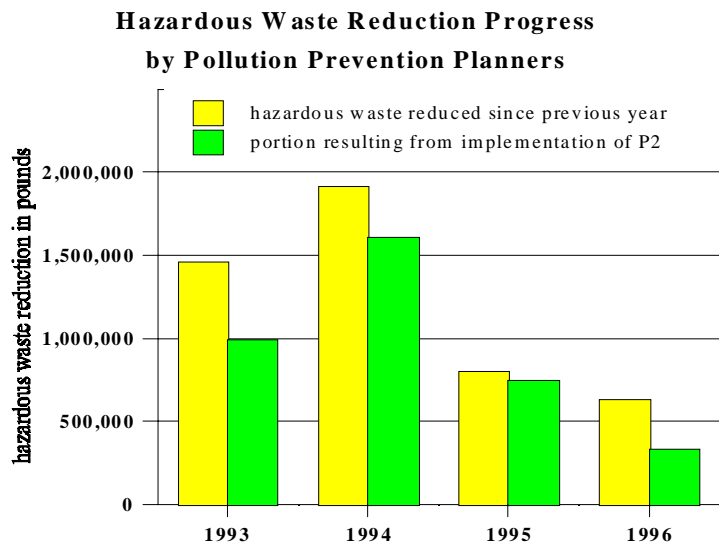


Figure 3.
 Source: Pollution Prevention Plan Annual Progress Reports 1993 - 1996.

The figure indicates that the greatest reductions occurred in 1993 and 1994. This might be expected as in these first years following passage of the planning statute, companies were able to implement the relatively “easy” and lower cost pollution prevention opportunities. For even the most environmentally proactive companies, continued reductions become increasingly difficult to achieve as those improvements are increasingly tied to the availability of investment capital and new technology. Another probable reason for the tapering off in recent years may be the result of increased production in an improving economy for many companies. Typically, as production increases, the amount of waste generated increases as well. It was not possible to “normalize” the statistics used to create Figure 3 for changes in productivity from year to year.

Figure 4 shows the type and number of pollution prevention measures that were implemented to reduce waste streams subject to planning. All of the methods shown are considered source reduction techniques except for “recycling outside process” (because this strategy does not result in reducing hazardous waste before it is generated).

Pollution Prevention Strategies Implemented by Planners in 1995 & 1996

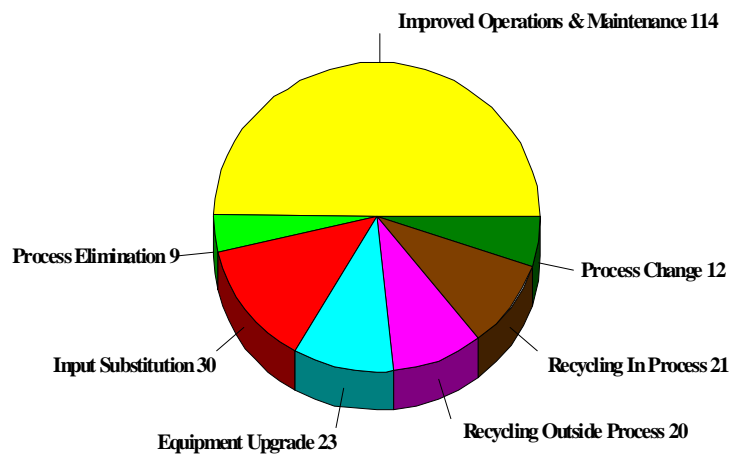


Figure 4.
Source: Pollution Prevention Plan Annual Progress Reports 1995 - 1996.

Toxics Release Inventory

It is clear that there are other strong incentives, beyond the planning requirement, for companies to implement pollution prevention. Certainly compliance with other environmental regulations, particularly Clean Air Requirements, serve as a major driver for companies to consider source reduction strategies along with treatment and control strategies. Also, Community-Right-to-Know laws, like the Toxics Release Inventory (TRI), are

powerful incentives for big companies to reduce the use of toxic chemicals in manufacturing and the release of toxics to the environment. TRI reporting is required by federal law. It requires Vermont’s largest manufacturers to report environmental releases of toxic chemicals to the U.S. EPA. **Figure 5** shows an impressive two-thirds reduction in the release of listed toxics since 1988. For the 38 Vermont facilities submitting TRI reports in 1995, ninety-nine percent of the reported releases were to the air.

Vermont Toxics Release Inventory (TRI)

1987 - 1995

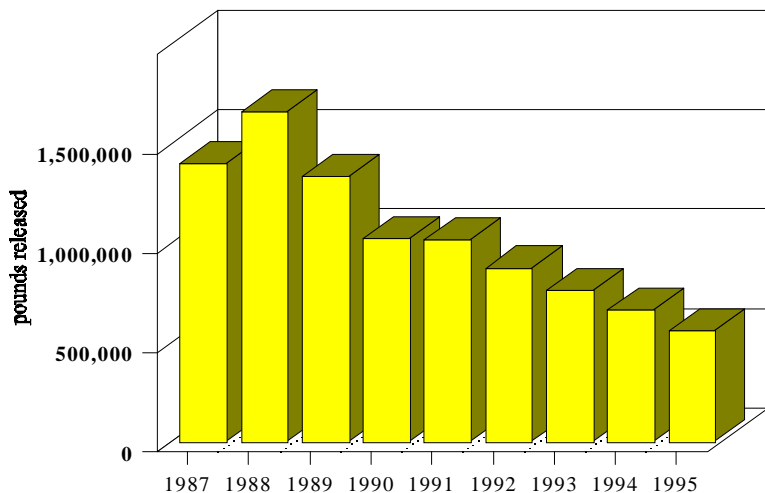


Figure 5.
Source: USEPA, Toxics Release Inventory Database includes toxic releases to all environmental media (air, land, water, and off-site transfers).

Large Users of Toxic Substances

As stated, 49 “large users of toxic substances” developed their initial pollution prevention plans in 1996. The chemicals of concern are the same chemicals that companies are obligated to report under TRI. However, the planning threshold of 1,000 lbs/yr is significantly lower than the TRI reporting threshold of 10,000 lbs/yr. Nineteen of the 49 large users reported a total reduction in chemical use of 751,655 pounds from 1995 to 1996. Fourteen of the 19 attributed the reduction either in whole or in part to the implementation of one or more of the source reduction strategies shown in Figure 4. An example of what one company implemented and the resulting savings is discussed in the following case study.

ETHAN ALLEN - BEECHER FALLS

The Beecher Falls Plant makes several styles of high-quality bedroom and living room furniture. In 1995, Beecher Falls switched to a higher solids sealer and topcoat. This manufacturing change reduced emissions of hazardous air contaminants and volatile organic compounds (VOCs) by about 55 and 28 percent respectively. The change enabled the company to use one topcoat application instead of two and saved the labor of two spray operators and two sanders.

Several obstacles had to be overcome in making the transition. The high-solids coatings could not be applied at room temperature so the company must now heat the material in-line. Ethan Allen had previously converted its conventional spray guns to the more efficient high volume, low pressure (HVLP) type. The HVLP gun cap, nozzle and tip were modified to accommodate the new coatings. The high-solids sealer requires more time to dry so air flow in the flashoff area was increased and a tunnel constructed to keep dirt off of the in-process furniture. Finally, the sealer coat now has a higher “build”, requiring two additional employees at the sealer sanding station. Still, the estimated payback on their investment is calculated at only around 4 months, and the resulting pollution prevention was substantial.

Future Issues and Trends in Facility Planning

With the exception of the 16 facilities that were new to the planning process in 1996, companies have undergone two rounds of facility planning. Most have successfully used the process to explore and implement pollution prevention measures. Since over 90% of facilities are required to plan because of their status as a generator of hazardous waste, the understandable emphasis in plans has been on hazardous waste reduction. For some companies, the opportunities for further improvements are truly limited barring changes in current technology and/or the availability of capital to invest in those changes.

Still, the Department expects the overall declining trend in hazardous waste generation to continue as companies are forced to carefully evaluate cleaner, more efficient technologies to remain competitive. The planning requirement is one more incentive that companies have to systematically consider new ways of doing business. The Department will continue to monitor these trends through its toxics use and hazardous waste reduction databases.

Also, as a voluntary action on the part of companies, planning should, and sometimes does include looking at the use of toxic materials regardless of whether the minimum threshold of 1,000 lbs/yr is exceeded, and regardless of whether use of that toxic results in the generation of a hazardous waste. In many of these instances, the

toxic poses a compliance question for the company as it struggles either to meet the discharge limit set in its wastewater permit or to remain below the “action level” established for some hazardous air contaminant. These situations often represent excellent opportunities for pollution prevention through changes in the manufacturing process. In their plan review function, staff of the Environmental Assistance Division will continue to work with willing companies in attempting to find the “source reduction” alternative, regardless of the impacted media.

As facilities implement environmental management systems (EMS) approaches to pollution prevention and compliance, such as through ISO 14000 or the Vermont Business Environmental Partnership (see Section II), EAD will be evaluating statutory changes to the planning law. The changes may include exempting facilities that institute an approvable EMS from pollution prevention planning requirements.

II. Business Assistance and Recognition Programs

On-Site Pollution Prevention Assistance

On-site assistance is provided in the form of pollution prevention opportunity assessments performed by Environmental Assistance Division (EAD) staff and/or the Retired Engineers and Professionals Program (REAP). In a given year, staff are able to provide direct on-site assistance to about 25 companies. Requests are generated through referrals from other DEC programs, from the EAD permit specialists located in the Regional offices, and from direct inquiries made by companies to the EAD assistance staff. Assistance is not limited to facilities subject to pollution prevention planning requirements. There are many examples of on-site assistance efforts that have directly led to a company's implementation of a pollution prevention alternative. These include an electroplating company that successfully switched from a toxic chlorinated solvent to an aqueous system for parts cleaning and a precision optics manufacturer that was able to use a new "blocking" wax so that a non ozone-depleting solvent could be used to remove the wax after grinding and polishing operations.

The REAP Program has been in place for five years and is now being administered through the Small Business Development Center in Randolph, with partial funding provided through special competitive EPA grants. The REAP Program has been particularly effective in helping smaller businesses like vehicle service, offset printers and auto body identify cost-cutting pollution prevention or other waste reduction measures through their on-site assistance efforts. REAP assessments are followed by a written report with recommendations back to the company.

Small Business Compliance Assistance Program

The Small Business Compliance Assistance Program (SBCAP) was established in December 1996. The program helps businesses in their efforts to comply with DEC's environmental regulations. The program has two components.

The on-site portion of the program provides small businesses with an on-site environmental compliance review upon request. The review results in a letter back to the business which discusses any non-compliance issues found with any of DEC's regulations, potential corrective measures and pollution prevention opportunities. This approach gives the business the opportunity to correct existing violations voluntarily without the threat of enforcement. Before participating in the program, businesses are made to understand that should a violation be found which threatens to cause substantial health or environmental harm, the appropriate DEC regulatory program must be notified. To date, the on-site program has visited seven small businesses, worked extensively with six other businesses via the phone and provided four workshops in different locations around the State to introduce businesses to new and changing environmental regulations. It is expected that the number of users will increase significantly once businesses and trade associations become more aware of the program.

The office-based program helps businesses by answering their compliance questions over a toll-free hotline. Businesses may ask their questions anonymously. To date the "office-based" SBCAP responds to an average of 3 calls per week that result in direct assistance. Numerous other calls taken in through the toll free hotline have been re-directed to the proper Agency or Division for assistance. It is also anticipated that hotline activity will increase as familiarity with the program increases in the business community.

During the past year, the office-based program produced its "Compliance Guide for Printers". The Guide

includes a concise self-audit checklist on compliance issues and contains many useful pollution prevention tips and best management practices specific to major process steps used by commercial printers. It will be direct mailed to approximately 200 small businesses in January, 1998. A similar document for vehicle service and repair facilities is expected to be ready for distribution in the spring of 1998. These types of small businesses often do not need DEC permits to operate and may only be subject minimally to other regulatory requirements, but are in need of a more basic understanding of environmental regulations and their applicability and assistance in navigating through the regulatory system. These compliance guides will be a valuable resource and a “one-stop shop” for comprehensive compliance information, for these types of businesses.

A Small Business Compliance Advisory Panel has been formed to advise EAD on program development and effectiveness in meeting the needs of small businesses.

Vermont Business Environmental Partnership

The Vermont Business Environmental Partnership is a voluntary, environmental assistance and business recognition program offered by the Environmental Assistance Division and the Vermont Small Business Development Center. The goals of the Partnership are to achieve greater environmental and economic performance and to promote public recognition of environmental excellence. Vermont small businesses joining the Partnership go beyond compliance with existing environmental regulations by using pollution prevention strategies and many components of an environmental management system (EMS). The Vermont Business Environmental Partnership allows participants to be recognized as *Environmental Partners* when they achieve a set of core environmental standards and a total of six elective standards. Once *Environmental Partner* status is attained, those wishing even greater recognition can satisfy additional, more rigorous standards to achieve status as an *Environmental Leader*. Such designation reflects a commitment to pollution prevention, regulatory compliance and exemplary environmental management through the implementation of an EMS.

The Partnership was conceptualized and run as a pilot in 1996 with approximately 15 Vermont printers and vehicle service providers. Funding for the initiative was made possible by a grant from EPA. The Division has received another grant from EPA to continue the Partnership program as a pilot in order to measure environmental improvements at businesses that are implementing (EMS).

Benefits from participation in the Partnership include a certificate, window emblem, and statewide recognition at a ceremony for the annual Vermont Governor’s Awards for Environmental Excellence in Pollution Prevention. Technical assistance services of the Environmental Assistance Division and the Retired Engineers and Professionals (REAP) Program are available to those seeking help to adopt and implement program standards.

Vermont Business Environmental Partnership Core Standards

1. Adopt, post and circulate an “Environmental Partner” policy statement to all employees.
2. Designate an environmental team representative at your facility.
3. Employ a prevention strategy to eliminate or reduce one form of hazardous or solid waste, a wastewater discharge, or an air emission.
4. Conduct an environmental opportunity assessment either on your own or using the services of technical assistance programs such as the Retired Engineers and Professionals Program.
5. Participate in at least one environmental training opportunity, or create one employee incentive to improve environmental management at your facility.
6. Notify your customers and the community at large about your efforts to improve environmental management at your facility.

Green Hotels in the Green Mountain State

In 1997, the Vermont Business Environmental Partnership expanded beyond its pilot phase to include another sector-specific outreach effort - directed to Vermont innkeepers. Lodging is an important part of the growing travel and tourism industry, which in Vermont is highly dependent on a clean and scenic environment. This is the magnet attracting many visitors to our state - and keeps them coming back. The lodging industry, with nearly 20,000 guest rooms, is already one of the "greenest" in the nation. Vermont innkeepers are recognized nationally as leaders in environmental management and environmental protection. Offering the program to Vermont innkeepers may not capture a service sector which generates high risk hazardous wastes, but it is a sector which generates high volumes of (generally solid) wastes, which consumes large amounts of water and energy resources, and for which many prevention, reuse, and recycling strategies exist. In addition, the potential educational value of having so many guests exposed to the environmental programs implemented at Vermont hotels, motels, and bed-and-breakfasts proved a powerful motivation for targeting this sector. The Division has mailed promotional materials to over 900 lodging establishments and is currently working with more than 30 facilities to achieve Partnership status. A steering committee comprised of businesses, trade associations, environmental interests and DEC regulatory programs is reviewing program standards and incentives prior to opening the program to other sectors.

Governor's Awards for Pollution Prevention - 5 Years Running

The Governor's Awards for Environmental Excellence in Pollution Prevention honors Vermont individuals, organizations, institutions, businesses, and public agencies using innovative approaches that reduce or eliminate the generation of pollutants and wastes at the source. These include the use of new technologies that save energy and other resources, the substitution of non-toxic for toxic materials, implementing changes in processes or procedures which reduce pollution and utilizing educational or promotional programs that have resulted in pollution prevention.

Nominations for this award are evaluated by a diverse panel of judges which includes representatives from industry, environmental organizations, academia, and government. Awards are made on the basis of technological and environmental significance, economic benefit or improved efficiency, and demonstration of commitment and leadership.

Governor Howard Dean, M.D. has recognized award winners for the past five years with a ceremony at the State House. The Governor's Awards has served as an effective tool for challenging businesses and government and Vermonters to achieve and implement prevention strategies.

In 1997, eight businesses, one state agency, and one individual were recognized. In 1996, five businesses, one individual, and one public agency were recognized with Governor's Awards.

Tivoly, Incorporated 1997 Governor's Award Winner

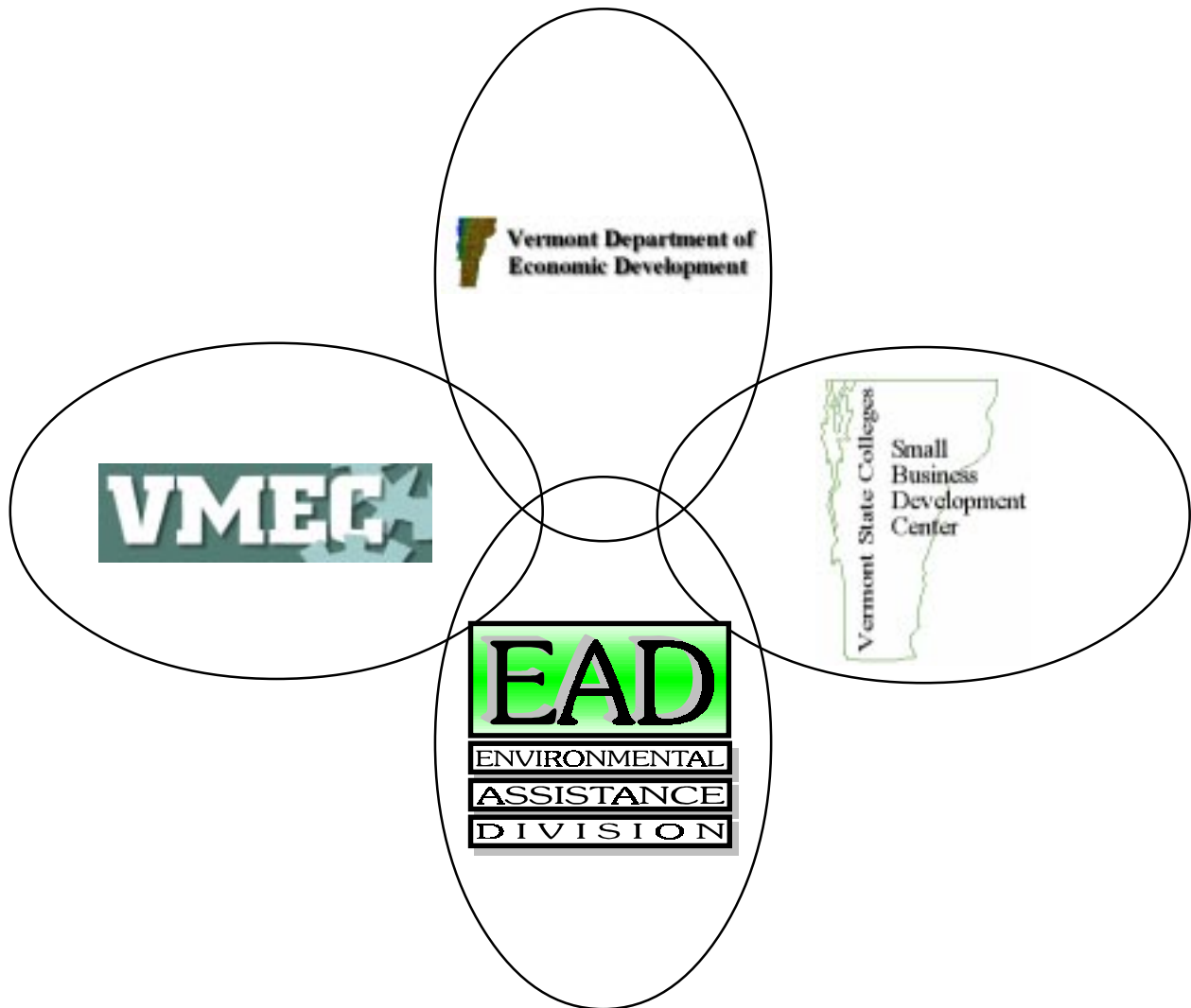
Tivoly, with 160 employees in Derby Line, was recognized as the first Vermont company to be ISO 14000 certified - and the first cutting tool manufacturer receiving ISO 14000 certification in North America. ISO 14000 is a series of international standards developed to prevent, reduce, and manage environmental impact of industrial activities. The ISO 14000 series of standards contain requirements and guidelines for establishing and maintaining a company's environmental management system. In the spring of 1996, even before the standard was officially approved, Tivoly's management team committed itself to seek this registration and started to work toward the development of documentation. Tivoly's environmental policy explicitly states that "Tivoly employees are committed to prevention of pollution, continual improvement and compliance to relevant regulations." Their environmental slogan, "ISO 14000 - A Crystal Clear Policy: PosiTIVOLY Committed to Environmental Excellence" helped build employee solidarity with the notion that environmental protection is everyone's responsibility.

Coordination of Environmental Assistance Providers

Prior to the inception of Vermont DEC's pollution prevention planning and technical assistance program in 1991-1992, there were few organizations providing environmental assistance to businesses. However, since this time, the number of organizations providing some form of business environmental assistance - be it energy conservation, solid waste/hazardous waste reduction and management, compliance or permitting - has dramatically increased on the national and state level. Oftentimes, organizations that provide other forms of business assistance may indirectly encounter issues related to the environment. Hence, it is becoming more critical for business assistance providers to coordinate their efforts to maximize effectiveness of the services delivered.

The Environmental Assistance Division is teaming with other non-profit business assistance providers that deal with environmental concerns - the Vermont Manufacturing Extension Center, Vermont Small Business Development Center, and the state Department of Economic Development - to develop a plan to better coordinate ongoing and future environmental assistance services

The collaborative partnership will identify priority areas for assistance coordination and referrals (such as on-site technical assistance, business training and workshops, permitting and compliance assistance). A collaboration plan and memorandum of understanding will be finalized in 1998, and efforts will be underway to demonstrate the plan implementation through pilot assistance projects with business and industry.



III. Solid Waste Source Reduction, Reuse, Recycling Initiatives

Composting

In 1997, a Compost Center was established with financial assistance from EPA. The goal of the Compost Center is to increase composting of non-recyclable clean organic wastes to produce high quality compost. This is achieved both through technical assistance for new or developing compost operations, through market development assistance for compost use, and through providing educational materials for backyard to large scale composting.

Vermont's waste consists of 25 to 40% food and yard waste (depending on geographical region). A significant amount of this material can be diverted from disposal and turned into a valuable soil amendment. Composting can occur at regional facilities or on area farms. On-farm composting of animal manures is an important alternative of proper nutrient management, enabling farmers to better control nutrient application to fields. Food wastes add both organic matter and valuable nutrients to the compost. Farm income can increase through tipping fees or sale of excess compost. Vermont has one regional composting facility in the Burlington area. Other population centers have the potential of developing similar facilities.

In its first year, the Compost Center focused on exploring compost uses, collecting and disseminating composting information, and evaluating compost regulations and regulatory incentives to encourage more composting in Vermont. Compost use demonstration projects were established in two areas: highway construction (one erosion control project) and golf course maintenance (top dressing of greens, fairways, or tees at three golf courses). Information and educational resources were developed including a compost library, a newsletter, Compost Corners, and a web page. Grants totaling \$11,500 were awarded to four projects for development of new on-farm composting facilities.

Construction Waste and Demolition Debris (C&D) Management

Vermont recycling programs have focused primarily on waste generated from households and businesses with little emphasis placed on recovering waste generated from construction and demolition sites. In FY 1997, the Waste Prevention Section formed a C&D Waste Reduction Committee to target this waste stream. The Committee included solid waste district members, haulers, recycling businesses and other Department of Environmental Conservation staff. To date, the Committee:

- ◆ has published the *Vermont Construction Site Reuse and Recycling Guide*,
- ◆ has evaluated Department of State Building job-site construction projects for opportunities to reduce, reuse, and recycle wastes,
- ◆ is currently funding an intern to evaluate market development barriers and opportunities for reusing and recycling C&D wastes.

Plastics Recycling Market Development

The Environmental Assistance Division completed its EPA-funded "Jobs Through Recycling" project in 1997. For this project, the Division decided to focus on plastics market development. This choice was made knowing that: 1) plastics are bulky and lightweight and therefore expensive to ship to out-of-state markets; 2) there are

few markets for plastics in Vermont; and 3) closer markets could enhance recyclability of this waste.

The Vermont initiative included:

- ◆ grants to two communities to improve collection programs and to two other communities to explore the economics of agricultural film recycling,
- ◆ consulting services for Vermont plastics manufacturers to evaluate the use of post-consumer recycled plastics for their products,
- ◆ testing and using recycled content plastic products in state government. Products tested were eight picnic tables at state rest areas, a boardwalk at Moss Glen Falls and a dock at Burton Island.

In 1997, the Division funded a project to evaluate the feasibility of grinding plastic into flakes at a Vermont Solid Waste District processing facility. It was thought that the resulting flakes could be used by Vermont manufacturers. However, the District determined that a grinding operation would not be feasible and is currently evaluating opportunities to increase demand for recycled content plastics.

Vermont Business Materials Exchange (VBMX)

The Vermont Business Materials Exchange was started in 1993 to provide businesses the opportunity to find outlets for their potentially reusable materials. Materials listed have included packaging materials such as pails, shipping boxes, and barrels; fabric scraps such as leather, wool and fleece scraps; and construction materials such as dry wall, concrete and scrap wood. While the Exchange is primarily funded by the Agency of Natural Resources, Casella Waste Systems sponsors monthly ads in a statewide business publication.

How it works:

- ◆ Businesses can list materials wanted or available in a catalogue that is published four times per year. Listings are also posted on an electronic listserve, a web page and in the Vermont Business Magazine.

Results:

- ◆ During 1997, 121 exchanges were made, a 29 percent increase in the number of exchanges over the previous year.

Waste Diversion Data Collection and Analysis: Reducing the Solid Waste Stream

In 1996, the Division completed an intensive analysis of solid waste in Vermont that was diverted from landfills through reduction, reuse, or recycling. The analysis also included an evaluation of the amount of waste disposed in order to estimate what the diversion rate was. Through a survey, completed in 1995, and other information reported to the Agency, data was collected for calendar year 1994. The analysis indicated that Vermonters were diverting 35% of the waste stream, 5% through measurable reuse and reduction and 30% through recycling, including composting. The results were published in the report "Vermont's Solid Waste Diversion in 1994". The survey of recycling and reuse in Vermont is available through the report "Results of Recycling, Composting, and Reuse Survey" by DSM Environmental Services, Inc.

IV. State Government Initiatives

Clean State Council

The Clean State Council is a governor appointed intrastate environmental team representing each department of state government. The council was created on April 22, 1994, Earth Day, when Governor Howard Dean signed Executive Order #06-94. This executive order outlines the duties and responsibilities that each state employee has in conserving natural resources and practicing pollution prevention. Preventing waste at the source and resource conservation are often the most inexpensive way to diminish pollution and promote resource conservation. The State of Vermont is committed to practicing resource conservation and pollution prevention as strategies to realize cost savings and enhanced environmental protection.

The Council created the Materials Management Plan in 1995 as outlined by the executive order. The Materials Management Plan serves as a guidance document to direct the council's work. One of the many areas the council agreed to pursue was environmentally preferable procurement.

Two pilot projects have resulted in significant results for state government in providing procurement leadership to reduce toxic chemical use. The first was an initiative to determine the feasibility of using chlorine free paper products. The results of this study has caused the Department of State Purchasing to contract for Processed Chlorine Free (PCF) printing and writing paper, effectively replacing paper that uses chlorine or chlorine derivatives as brighteners.

The second pilot project required the efforts of an inter-agency work group for over a two year period. Charged with developing a system to evaluate and procure environmentally preferred cleaning supplies, the group worked to:

- ◆ minimize work place exposure to hazardous cleaning chemicals while maintaining or surpassing custodial performance standards;
- ◆ utilize the strategies of hazardous waste reduction and toxics use reduction to minimize the negative environmental consequences of the State's cleaning operations; and
- ◆ develop custodial product procurement criteria for State purchasing agents.

The selection criteria this group developed were used in a solicitation for bids; cleaning supplies were screened for the veracity of environmental claims; and products were field tested and evaluated for efficacy. Ultimately, two vendors were selected to provide the state with a full complement of environmentally-safe cleaning supplies that are now the default selection for State purchasing agents.

Vermont Agency of Natural Resources Pollution Prevention and Resource Conservation Plan

The Vermont Agency of Natural Resources manages more than 280,000 acres of public land; occupies buildings with settings which include offices, park stations, fish hatcheries, and laboratories; and it owns, operates, and maintains more than 200 vehicles. It is clear that even in our efforts to enhance and protect the environment there is much that we do that invariably consumes resources and generates waste.

To address the environmental consequences of our own operations, Agency Secretary Barbara Ripley announced release of this Agency's first Pollution Prevention and Resource Conservation Plan. This plan represents the work of more than 50 people, both inside and outside of the Agency, who contributed their talents to look comprehensively and critically at the many common and everyday processes that make up our day-to-day operations. Their evaluation identified environmentally sound practices, which if implemented, accomplish pollution prevention and resource conservation.

It is anticipated that this plan will help the Agency to:

- ◆ improve environmental quality and reduce resource consumption,
- ◆ reduce operating costs,
- ◆ build upon and maintain its culture of environmental sensitivity,
- ◆ practice/demonstrate environmental leadership and stewardship, and
- ◆ reinforce the Agency's purpose and mission.

The Environmental Assistance Division is responsible for monitoring and tracking progress on plan implementation. The full text of the Plan is available on the internet on the Agency's web page.

Northeast Waste Management Officials Association (NEWMOA)

Northeast Waste Management Officials Association (NEWMOA) is an official interstate organization for solid waste, hazardous waste, waste site cleanup, and pollution prevention, whose members include Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island and Vermont. The Waste Management Division and the Environmental Assistance Division are active participants in NEWMOA activities.

The Environmental Assistance Division participates in the Pollution Prevention Program or Northeast Pollution Prevention Roundtable which undertakes the following:

- (1) quarterly meetings and workgroup sessions of the Roundtable;
- (2) regional pollution prevention information resource center and databases of information;
- (3) source reduction research and publications;
- (4) technical training sessions for pollution prevention staff; and
- (5) Regional policy coordination and development.

The Pollution Prevention Roundtable provides a valuable forum for information sharing and technology transfer on topics such as pollution prevention integration, industry-specific pollution prevention technologies, technical training sessions for division staff, and evaluation of technical assistance program effectiveness.

Northeast Recycling Council

EAD staff represent Vermont state government on the Northeast Recycling Council (NERC). The Council's mission is to ensure the long-term viability of recycling in the Northeast while maximizing its full environmental

and economic benefits. The Division develops and promotes NERC projects to Vermont businesses, associations and economic development officials. During fiscal year 1997 projects included:

- ◆ *Business Financing Seminars and Investment Forums* - to assist recycling businesses in obtaining financing;
- ◆ *Model State Recycling Rate Measurement Methodology* to develop a uniform methodology for reporting state recycling data and calculating state recycling rates; and
- ◆ Work with Newspaper Publishers Association, Yellow Pages, and Direct Marketing Association to expand their environmental initiatives including recycled content purchasing, design for recyclability and source reduction.

Toxics in Packaging Clearinghouse

In 1990, the Vermont Legislature amended the state's waste management statute to include specific limitations on the use of heavy metals in packaging (10 V.S.A. §6620). This effort to reduce environmental impacts from every day waste disposal practices was developed through the Coalition of Northeastern Governor's Source Reduction Task Force. The legislation reflected consensus among industry, environmental and government leaders that certain heavy metals with significant environmental impacts, specifically mercury, cadmium, lead and hexavalent chromium, could be virtually eliminated from use in product packaging and ultimately, kept out of the solid waste stream..

Model legislation drafted by the Coalition of Northeastern Governors (CONEG) was introduced and adopted by almost every northeastern state legislature. Unique in these laws were provisions allowing their cooperative administration through a central clearinghouse managed by a regional body. As a result, the Vermont Agency of Natural Resources worked closely over the years with the Toxics in Packaging Clearinghouse at the Coalition of Northeastern Governors' Policy Research Center. The Clearinghouse provides information to manufacturers on heavy metal restrictions in packaging, and the member states evaluate exemption requests for packaging not meeting the standards.

Early in the 1996 Legislative session, the Agency supported a series of housekeeping amendments in Senate bill S.344 designed to keep 10 V.S.A. §6620 current and responsive to the needs of its regulated community through strengthened regional cooperative efforts. These stronger regional ties proved beneficial during 1997, following closure of the CONEG Source Reduction Program at the end of December 1996 and withdrawal of administrative support from the Toxics in Packaging Clearinghouse. Throughout the past year, clearinghouse member state representatives have continued to meet for the purpose of joint administration of our statutes and securing an appropriate intergovernmental organization to serve as administrative host to the clearinghouse. Commencing January 1, 1998 The Council of State Governments will administratively serve the needs of the Toxics in Packaging Clearinghouse.

Pollution Prevention Integration

Work continues on integrating the pollution prevention concept and strategy into DEC regulatory functions of permitting, compliance and enforcement and rulemaking. Incorporating pollution prevention into regulatory policy and practice represents a new strategic direction from the pollution control policies and approaches of the past, where emphasis had been placed on cleaning up, treating and disposing of contaminants and wastes after they are generated.

The most progress in pollution prevention integration has been made in the area of DEC rulemaking, where new procedures are now in place that require regulatory programs and divisions to identify how prevention strategies were considered in rules that are being drafted. The Environmental Assistance Division also provides comments to regulatory programs at the pre-rulemaking and preliminary draft stages on prevention opportunities.

The groundwork has been laid for pollution prevention integration activities in permitting, compliance and enforcement. The Environmental Assistance Division has met with each Division of DEC to identify opportunities for future incorporation of prevention strategies and has plans to provide training and information exchange with permit writers, inspectors, and enforcement personnel.

V. Consumer Education

Recycling Hotline - 1-800-932-7100

The Vermont Recycling Hotline has been fielding questions from Vermont residents, businesses, students and consumers for ten years. In Fiscal Year 1997 the hotline received 756 requests for assistance. The hotline acts as a clearinghouse for information focusing on solid waste reduction and recycling issues, Monday through Friday, 8:00 to 4:30.

This statewide hotline works in close cooperation with solid waste management districts and towns to provide the latest information on area recycling opportunities, new reuse options and emerging market development trends. The state's hotline information is now linked with the U.S. Environmental Recycling Hotline sponsored by the Environmental Protection Agency. By entering their zip code after dialing 1-800-Clean-Up, Vermonters can receive general recycling information for their area 24 hours a day.

Consumer Outreach Campaigns

Vermont joined 41 other states in celebrating the first America Recycles Day on November 15, 1997. The theme for this year's event was ***Keep Recycling Working: Buy Recycled*** to encourage people to close the recycling loop by purchasing recycled content products. Over 750,000 Americans pledged to increase their recycling and efforts to buy items made from recycled material as part of the first national America Recycles Day.

Senator James Jeffords, co-sponsor of the Congressional Resolution, declaring November 15, 1997 and 1998, America Recycles Day, was joined by White House Environmental Executive Fran McPoland at Recycle North in Burlington to share their comments on the importance of protecting the environment in Vermont and nationally, as well. Future information on this annual event can be found on the internet at www.americarecyclesday.org

Merry Mulch now in its ninth year is a mature program that helps keep thousands of holiday trees out of Vermont landfills. It is a Christmas tree chipping program that also saves on the unnecessary waste of a valuable natural resource, turning the trees into highly desired mulch.

A 1996 survey to solid waste district recycling coordinators estimated a minimum of 6,000 trees a year are kept out of Vermont landfills, by being sent to one of the 50 drop off sites around the state.

Education Grants

Since 1989, the Department of Environmental Conservation (DEC), Waste Prevention Section has allocated \$80,000 toward Youth Education Solid Waste Reduction and Reuse projects. Over the years, 40 different youth education grants have been funded. The majority of the grant money addressed resource conservation issues while a smaller amount of funding was allocated to composting and hazardous waste education, versus implementation grants. DEC grant money has been leveraged against an additional \$50k matching funds, effectively funneling \$130k towards raising the environmental awareness of Vermont's children, school teachers and staff and family members.

Though it is difficult to quantify educational benefits, we could evaluate our educational programs against our solid waste diversion goal. Today at 35%, Vermont is effectively on the way to successfully meeting our 40% diversion goal by the year 2000.

Recipients of grant funding have included individual schools and colleges, solid waste districts, and environmental nonprofits, including the Association of Vermont Recyclers (AVR), the Vermont Institute of Natural Sciences and Food Works (VINS). Projects, such as AVR's Teacher's Resource Guide, funded through DEC grant programs have received national exposure and interstate interest about Vermont's backyard burning health risk education. It is exciting being involved in these innovative programs as Vermont educators continue to come up with novel ideas, such as interactive theater programs, on how to educate subsequent generations of Vermonters on resource conservation and pollution prevention issues.

Shelf Labeling/Consumer Labeling Initiative

Household hazardous product shelf labeling was mandated as one element of the 1990 Vermont Toxics Use Reduction Act. This consumer education program was adopted as an alternative to a hazardous products advance disposal fee which would have been levied to fund state-wide collection and disposal of household hazardous wastes. By 1992, through Agency consultation with retailers, product manufacturers and other interested parties, the shelf labeling program had developed shelf labels that not only identified hazardous products, but also those which were exempt from program requirements. Ultimately, this very detailed approach proved cumbersome.

On January 10, 1996 the Agency submitted a report to the Natural Resources and Energy Committees of the General Assembly concerning the success of its efforts to simplify the consumer hazardous product shelf labeling program in Vermont. The simplified program has been well received and has slowly replaced the older materials in stores throughout the state. It was also early in 1996 that the United States Environmental Protection Agency invited Agency of Natural Resources staff to serve on the task force guiding its national Consumer [hazardous products] Labeling Initiative (CLI). Like Vermont's shelf labeling program, the goals of the CLI are to prevent pollution by fostering consumer choice through improved understanding of product hazards. The initial CLI Phase I Report was completed in September 1996. The Agency continues to participate on the US EPA Consumer labeling Initiative Task Force as it enters a second research phase of the project.

VI. DEC Intradepartmental Coordination

Introduction

Thirty years ago, DEC was comprised of 2 or 3 very small sections which administered one or two regulatory programs. Over the years, the Department has grown to encompass some 240 staff and fourteen distinct regulatory programs in its eight divisions. Because of the impacts that one program can have on programs in other divisions, staff can no longer operate day to day without giving any consideration to the other programs. To do so would not only cause innumerable conflicts within the Department it would also cause extensive problems for the public in its dealings with the Department whether it be in the permitting, enforcement, compliance or information gathering areas. More than ever, staff need to be aware of and try to prevent the adverse impacts that could result from trying to operate in a vacuum with no regard for the other programs.

Realizing this need, the Department of Environmental Conservation initiated an intradepartmental coordination effort in 1995. This effort was designed to reduce the number of conflicts which occur between the Department's regulatory programs and to institute continuous quality improvement in five functional areas of the department (planning; rule making; permitting; information systems; and inspections, compliance and enforcement). Both of these goals should in turn result in improved public service and protection of the public health and the environment.

A major part of this coordination effort occurs through five on-going "coordination teams". Each team focuses on one of the five functional areas listed above. The teams are comprised of representatives from each of the DEC divisions and are assisted by an assigned external coordinator. The external coordinators work out of the EAD.

On average, these coordination teams have been operating for two years. During this time, they have accomplished the following major work items at the direction of the department's upper management:

Planning Team

- ◆ A program review report summarized and ranked all of the work currently performed by DEC. This report was used to identify areas which could be streamlined or reduced so that the department could assimilate the loss of 22 positions during the next two years without causing an increased risk to public health and the environment. The loss of positions was due to the Governor's initiative to reduce the size of state government.
- ◆ DEC's mission, vision, guiding principles and philosophy of management & supervision were developed and put down in writing by this team. These documents provide a "departmental direction" for DEC staff to follow in their daily work. The philosophy of management & supervision sets specific expectations of the Department's managers and supervisors which ultimately result in a more productive workplace.
- ◆ The first DEC strategic plan, operational plan and 1999 priorities were created. These plans establish goals and objectives for each of DEC's programs along with the strategies for achieving the objectives. It should be noted that, when determining the Department goals, DEC held five public meetings throughout the state and hired a professional pollster to conduct a phone survey in order to obtain public input. The operations plan includes detailed information on each of the 78 separate projects which work toward the attainment of the objectives. Each project is detailed on its own project sheet which lists the project's: indicators of success,

anticipated outputs, resources, work involved, etc.

- ◆ Information was gathered for input into the SFY 98 & 99 budget documents. This information was well received by the Governor and legislature. For the first time, DEC was able to relate costs to specific work outputs.
- ◆ The results of the planning process are being used as input into the operating grants agreement between DEC and EPA but more integration of the planning and grants processes is necessary to reduce duplication.

Rule Team

- ◆ The DEC rulemaking procedure was revised and four rules were selected to undergo the process in 1997 and 1998. The rulemaking procedure is designed to reduce conflicts between programs when rules are developed, improve public participation in rulemaking, include pollution prevention in DEC rules, make our rules easier to understand and in a standardized format, and eliminate rules no longer needed.

Permit Team

- ◆ The permit customer survey was created. This survey is sent to each applicant who completes a permitting process in DEC. Of the 472 survey respondents to date, 73% rated their overall permitting experience as above average to excellent, while 7% rated the experience as poor. Based primarily on the respondents' comments on the survey forms, the top issue regarding the DEC permitting process focuses on program regulations. A consolidation of several comments summarizes it best: "A balance needs to be sought (in regulations) between environmental risk and economic resources. Especially for small projects, the regulations are overwhelming, time consuming and costly for the benefit they produce. Consideration should be allowed in regulations to accommodate the small projects that are not likely to have the impact (environmental or health) that a large project might." This survey continues and the results are being incorporated into the Department's permitting system review and revision efforts.
- ◆ In order to provide permit applicants with a greater degree of predictability in the Department's administrative and technical reviews of their applications, the DEC application review procedure was developed and adopted. This procedure insures that a consistent approach is used throughout the DEC in these application reviews.
- ◆ A project permit screening process was established beginning with the development and routing of project review sheets. This process enables applicants to learn early in the permitting process which permits they will need to obtain.

Inspection, Compliance and Enforcement Team

- ◆ This team developed a process for the "cross-training" of many of the DEC inspectors so that they can now do inspections in a second regulatory program in addition to their primary program. This ability to inspect for two regulatory programs instead of one results in an increase in DEC inspection efficiency as well as increased on-site oversight for the Department regulatory programs. Both of these Departmental benefits help to insure that compliance is being maintained with environmental requirements. Comments have also been re-

ceived that some facility owners like having more than one inspection completed during one visit as it makes efficient use of their own staff's time.

- ◆ Several years ago the Department developed a multimedia checklist for the inspectors' use. This checklist enables the inspectors to look for indications of violations in five of the Department regulatory programs while conducting their own program inspection of a facility. The team updated the checklist and re-instituted its use so that it is now used at every facility inspected by Air, RCRA, and Wastewater inspectors.
- ◆ The team developed and implemented a guidance document for DEC notices of violation issued from the office so that they are in a consistent format and their contents are consistent with statute requirements. This consistency and predictability on the part of the Department is bound to be appreciated by the regulated community.

Information Management Systems

Throughout the DEC, all kinds of information must be managed. This information includes: the monitoring results which permittees are required to submit; correspondence both to and from the Department; rules and regulations; information related to various certification programs; data from departmental studies; and funding information for DEC loan and grant programs. With the advent of the computer, this information is handled not only in hard copy but is just as likely to be managed in a computerized format. As the amount and complexity of the information needing to be handled increases, it has become obvious that the Department needs to insure that it is done as expeditiously and efficiently as possible. The Information Management System team has been given the responsibility for enhancing the use of computers throughout the Department for this purpose. The team has accomplished the following:

- ◆ A unified DEC computer network was proposed and implemented for existing DEC information systems services.
- ◆ Email training for staff was conducted with increased effectiveness of Email measured by staff. Training included development and distribution of an Email brochure.
- ◆ A Long Range Plan for information systems was developed and adopted. This plan sets both the priorities for the various information system elements as well as the order in which the priorities will be undertaken during the next four years.

The Long Range Plan identifies six areas for initiative. These are: document management, data management, public records access, policies & procedures, information systems & networking, and training. Each of the six areas in the plan are complex and will take considerable time and effort to work through.

For example, the document and data management work has four steps for completion. The first step is developing a workable operating practice for document retention. By examining the concept of value in documents, reasonable retention periods will be defined for different types of documents (e.g. it may be determined that some documents of little value, such as electronic drafts without typographic corrections, may not need to be retained). A practice which describes these types of common sense actions is under development. The succeeding four steps in the document and data management work are: defining an indexing system, deciding on archival systems and conducting an assessment on the use of "imaging" as part of DEC's management of documents. Imaging is essentially the copying of hard documents into an electronic format for storage; if its use is success-

ful, imaging could save the DEC reams of paper and storage space. As can be seen, the overall goal of this project is to create an efficient means to store, recover and provide information to the public and the department staff.

APPENDIX A: PUBLICATIONS

(Note: Charges apply only to out of state non-government requests. There is no charge for state and municipal agencies or in state requests.)

Pollution Prevention and Compliance Assistance

1. *Pollution Prevention for Drycleaners.* Industry Bulletin. Summer 1997.
2. *A Printer's Guide to Vermont's Environmental Regulations.* Compliance Assistance Guide. Fall 1997.
3. *Department of Environmental Conservation Permit Handbook.* Comprehensive Compliance Assistance Manual. Revised December 1997.
4. *Pollution Prevention Case Study : Chroma Technology Corporation.* Brattleboro, Vt. 1996.
5. *Pollution Prevention Case Study : Moot Wood Turnings, Inc.* Northfield Falls, Vt. 1997.
6. *Pollution Prevention Case Study : Cutting Costs through Improved Inventory Control at UVM.* Burlington, Vt. 1997.

Recycling, Resource Conservation and Composting

EDUCATIONAL MATERIALS

Association of Vermont Recyclers (AVR) Publications: *AVR Teacher's Resource Guide* (1989); *AVR Teaching Toxics* (1992); *AVR Hazardous Materials Management Manual for Schools* (1992).

Recycled Earth Tunes: A project on musicmaking & instrument construction from recyclables. 1996

School Cafeteria Waste Composting: suggested System Design. July 1989

Scraps to Soil: A How-To Guide for School Composting. July 1995 Out of state requests contact AVR.

Special Events Recycling Guide. 1994

Out of state charge: \$2.50

Waste Not Vermont! A booklet to help learn the 5 R's and remember them. June 1994.

Out of state charge:

BROCHURES

Backyard Burning

Composting at Home

Diapers: Cloth Versus Disposable

Don't Spoil the Soil: Recycle Used Oil

Household Hazardous Products

ENVIRONMENTAL SHOPPER CONSUMER BROCHURE SERIES

* Out of state charge for full series : \$4.00 *

Be an Environmental Shopper	Waste Reduction	Recycled Paper
Recycled Content and Recyclability	Purchasing Power	Re-Use
Plastics Products and Packaging	Automotive Products	Recycling Household Items
Home Composting	What Recycled Materials Become	Household Hazardous Cleaners

DIRECTORIES

Directory of Vermont Recycling Collection Programs. August 1996

Markets and Special Services Directory for Reusable and Recyclable Materials. February 1996

GUIDANCE DOCUMENTS

Composting Organic Wastes on the Farm. March 1991

Out of state requests \$10.00.

Construction and Demolition Debris Recycling in Vermont. Dec. 1990, 255 pp.

Out of state charge: \$10.00

Construction Waste & Demolition Debris Sourcebook. September 1994

Out of state charge:

Cost Comparison of Using Disposal vs. Reusable Dishes and Silverware in a Cafeteria. Feb. 1989, 7pp.

Did you know that the Vermont Legislature has banned some wastes from Landfills? October 1992

Exempt Small Quantity Generator's Handbook. 1991

Out of state requests: Contact Hazardous Materials Division. (802) 241-3888.

Guidance Document for Establishing Yard Waste Composting Operations. March 1992

Out of state charge: \$2.50

Guidelines for Establishing a Do-It-Yourself Used Oil Collection Center. October 1993

Out of state charges \$2.50

Hazardous Materials Management Manual for Schools. AVR (1992)

Management of Mercury-Containing Lamps. March 1995

Out of state charge

Office Paper Recycling Pilot Project. August 1990

Out of state charge: \$2.50

Paint Drop and Swap: Guidelines for Conducting Events. revised August 1990

Out of state charge: \$5.00

Salvaging and Recycling Building Materials. September 1990

Out of state charge: \$2.50

Scrap Metal Recycling in the State of Vermont. May 1990

Out of state requests should be referred to the Association of Vermont Recyclers, (802) 229-1833.

School Cafeteria Waste Composting: suggested System Design. July 1989

Special Events Recycling Guide. 1994

Out of state charge: \$2.50

Usable Organic Waste Products in Vermont. Jan 1991

Out of state charge: \$4.00

Utilizing Newsprint for Animal Bedding. 1989-1990

Out of state charge: \$2.50

Vermont Clean State Initiative: Materials Management Plan. July 1995

Vermont Household Battery Report. January 1992

Vermont Waste Paint Report. January 1992

Vermont Solid Waste Management Division: Guidelines for Transportation of Household Hazardous Waste.

September 1991 Out of state charge: \$2.50

Improving the Efficiencies of Plastics Recycling in a Rural State. February 1997

NEWSLETTERS

- VBMeX (Vermont Business Materials Exchange)

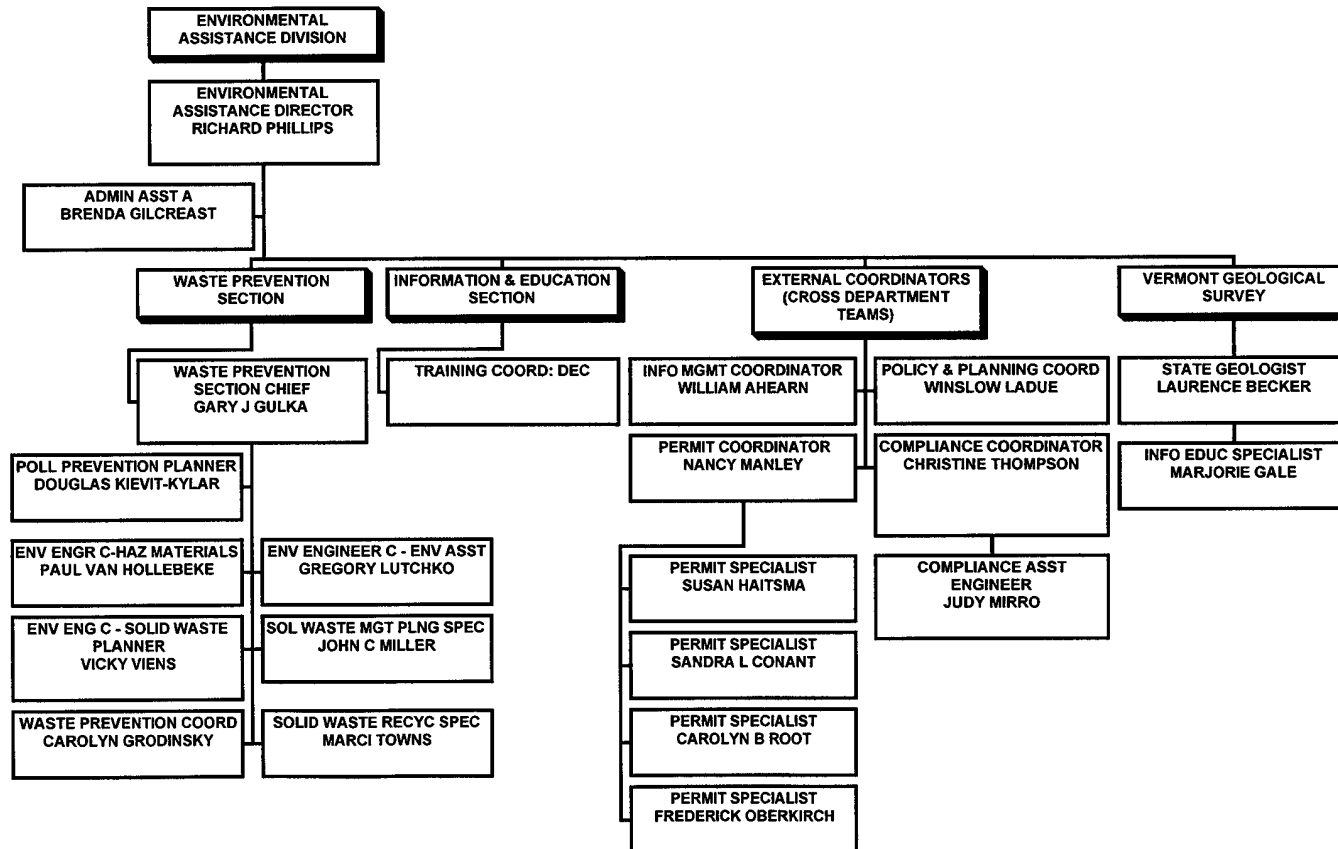
- Environmental Assistance Newsletters, April, July, Summer '93, Winter '94, Fall/Winter '94/'95

OTHER

Vermont Recycling Hotline Bumper Sticker and Pledge Card 1995

APPENDIX B: EAD ORGANIZATIONAL CHART

DEPARTMENT OF ENVIRONMENTAL CONSERVATION ORGANIZATION CHART ENVIRONMENTAL ASSISTANCE DIVISION



APPENDIX C: ENVIRONMENTAL ASSISTANCE DIVISION BUDGET

FISCAL YEAR 1998 BUDGET

Personal Services	\$ 972,291
Operating Expenses	166,648
Grants	74,000
Other	<u>13,000</u>
Total	\$ 1,225,939

Receipts Source

Environmental Permit Fund	\$26,265
Pollution Prevention Plan Fees	100,350
Federal Funds	400,755
Hazardous Waste Mgmt. Assist. Fund	201,925
Solid Waste Mgmt. Assist. Fund	341,331
State General Fund	<u>155,313</u>
Total	\$ 1,225,939

APPENDIX D: STATUS OF COMPANIES SUBJECT TO ACT 100

Planner Classification

- A - Class A hazardous waste generator (generates >2,200 pounds of hazardous waste per month)
- B - Class B hazardous waste generator (generates >220 and <2,200 pounds of hazardous waste per month)
- L - Large User of toxic substances (uses more than 1,000 pounds of a SARA listed toxic substance annually)
- AL - Class A generator that is also a Large User
- BL - Class B generator that is also a Large User

Pln Review Status

- S - Plan voluntarily submitted to EAD for review
- F - Plan held by company for review on-site
- Blank - Plan has not been completed
- 1 - Plan reviewed and approved
- 2 - Plan reviewed and conditionally approved
- 3 - Plan reviewed and found deficient
- 4 - Plan review pending

PLANNER CLASSIFICATION	PLANNING FACILITY	PLAN REVIEW STATUS
A	B.F. GOODRICH AEROSPACE	S4
A	BIJUR LUBRICATING CORPORATION	F1
A	BRYANT GRINDER CORPORATION	S1
A	CONE-BLANCHARD MACHINE COMPANY	S1
A	ETHAN ALLEN (ISLAND POND)	S1
A	FIBERMARK	S1
A	GENERAL DYNAMICS	F4
A	GENERAL DYNAMICS	F4
A	GEORGIA-PACIFIC CORPORATION	S4
A	GREAT BROOK FURNITURE	S1
A	ITS ENVIRONMENTAL	F4
A	LANE PRESS	F1
A	MACK MOLDING CO.	S1
A	MOBIL OIL BURLINGTON TERMINAL	F4
A	SAFETY-KLEEN CORP.	F4
A	UNIVERSITY OF VERMONT	S1
A	VERMONT CASTINGS FOUNDRY DIVISION	F4
A	VERMONT PRECISION TOOLS	S4
AL	BERTEK	F4
AL	BLODGETT OVEN COMPANY	S4
AL	C.E. BRADLEY LABORATORIES	S4
AL	EHV WEIDMANN INDUSTRIES	S1
AL	ETHAN ALLEN (BEECHER FALLS)	S1
AL	ETHAN ALLEN (ORLEANS)	S1
AL	ETHAN ALLEN (RANDOLPH)	S1

PLANNER CLASSIFICATION	PLANNING FACILITY	PLAN REVIEW STATUS
AL	EVEREADY BATTERY (BENNINGTON)	F4
AL	EVEREADY BATTERY (ST ALBANS)	F4
AL	FELLOWS CORPORATION	S1
AL	G.S. PRECISION	F4
AL	GENERAL ELECTRIC (COLUMBIA AVE)	F4
AL	GENERAL ELECTRIC (WINDCREST RD)	F4
AL	GREENFIELD INDUSTRIES	S1
AL	IBM	F4
AL	LAVALLEE & IDE	S1
AL	SHELBURNE CORPORATION	F4
AL	TIVOLY, U.S.A.	S1
AL	US SAMICA CORPORATION	S1
AL	VERMONT CASTINGS	F4
AL	VERMONT CIRCUITS	S1
B	ALDERMAN'S CHEVROLET	S4
B	BELDEN WIRE AND CABLE	S1
B	BOMBARDIER TRANSIT CORPORATION	F4
B	BOOK PRESS	F1
B	BURLINGTON FREE PRESS	S1
B	BURLINGTON INTERNATIONAL AIRPORT	
B	C & S WHOLESALE GROCERS	S2
B	CAPITAL CITY PRESS	S4
B	CARRIS REELS	F4
B	CHAMBERLAIN MACHINE	F4
B	COLUMBIA FOREST PRODUCTS	S1
B	CVPS (POST ROAD)	S1
B	CVPS (RUTLAND)	S1
B	DYNAPOWER CORPORATION	S4
B	EDLUND COMPANY	F4
B	FLETCHER ALLEN - MED CTR CAMPUS	S1
B	GADUES DRY CLEANING	S4
B	GATEWAY MOTORS	S3
B	GOSS DODGE	S1
B	GREER'S HOUSE OF DRY CLEANING	
B	GW PLASTICS (S. ROYALTON)	
B	GW PLASTICS (BETHEL)	
B	HAYWARD TYLER	S1
B	HERITAGE FORD	S1
B	HERITAGE TOYOTA	S1
B	HERTZ PENSKE TRUCK RENTAL	S4
B	IMTEC	S4
B	JASONS DRY CLEANING #1	S1
B	JASONS DRY CLEANING #2	S1
B	JASONS DRY CLEANING #8	S1
B	KILLINGTON SKI RESORT	S4

PLANNER CLASSIFICATION	PLANNING FACILITY	PLAN REVIEW STATUS
B	KINNEY MOTORS	S1
B	LAKE CHAMPLAIN FERRY	
B	LILY TRUCK LEASING CORPORATION	S4
B	LOVEJOY TOOL COMPANY	S1
B	LUZENAC AMERICA (LUDLOW MILL)	F4
B	MAD RIVER CANOE	
B	MAL TOOL & ENGINEERING	F4
B	MILLER AUTOMOBILE	
B	MOORE BUSINESS FORMS	S1
B	MOUNT MANSFIELD COMPANY	S4
B	MOUNT SNOW RESORT	S4
B	NASTECH	S4
B	NEW ENGLAND CENTRAL RAILROAD	
B	NEW ENGLAND POWER-BELLOWS FALLS	F4
B	NEW ENGLAND POWER-HARRIMAN	F4
B	NEW ENGLAND POWER-VERNON	F4
B	NEW ENGLAND POWER-WILDER	F4
B	NEWPORT PLASTICS CORP.	
B	OFFSET HOUSE	S4
B	OKEMO MOUNTAIN	S1
B	OMYA (FLORENCE)	
B	OMYA (PROCTOR)	
B	PRECISION ROTARY INSTRUMENTS	
B	QUEEN CITY PRINTERS	S4
B	ROBERTS CAD CHEV	
B	ROCK OF AGES (560)	S1
B	ROCK OF AGES (772)	S1
B	RUTLAND PLYWOOD	
B	SHEARER CHEVROLET	S4
B	SHEARER OLDS CADILLAC PONTIAC	S4
B	SHELBURNE SHIPYARD	F4
B	SPRINGFIELD ELECTROPLATING	S1
B	ST MICHAELS COLLEGE	
B	STANLEY TOOLS (EAGLE SQUARE)	F4
B	STANLEY TOOLS (PITTSFIELD)	S1
B	SUGARBUSH VALLEY	
B	THE ORVIS COMPANY	F4
B	THE STANDARD REGISTER COMPANY	
B	TIMOTHY COPELAND & SONS	
B	TRIANGLE METAL FABRICATORS	S4
B	TUTTLE LAW PRINT	S1
B	US TSUBAKI	
B	VELAN VALVE CORPORATION	S4
B	VERMONT AIR GUARD	S1
B	VERMONT AOT, MAINTENANCE DIV	S4

PLANNER CLASSIFICATION	PLANNING FACILITY	PLAN REVIEW STATUS
B	VILLANTI & SONS PRINTERS	F4
B	VTARNG-COMBINED SUPPORT SHOP	S1
B	VTARNG-MAINTENANCE SHOP #1/#3	S1
B	VTARNG-MAINTENANCE SHOP#7	S1
B	VTARNG-UNIT TRAINING EQUIP SITE	S1
B	WALKER MOTORS	S1
B	WALLACE COMPUTER SERVICES	S1
B	WHITCRAFT NORTH	S4
B	WHITE RIVER TOYOTA	S1
B	WYETH NUTRITIONALS	
B	YANKEE CORPORATION	F4
BL	CHAMPLAIN CABLE CORPORATION	S1
BL	CPM	S4
BL	FAIRBANKS SCALE OF FAIRBANKS	S1
BL	FULFLEX OF VERMONT	F4
BL	HAZELETT STRIP CASTING	F4
BL	J K ADAMS COMPANY	F4
BL	NEXUS CUSTOM ELECTRONICS	S1
BL	ROCK-TENN COMPANY	S4
BL	SIMPSON PAPER PRODUCTS	S1
BL	TANSITOR ELECTRONICS	F4
BL	THE STINEHOUR PRESS	
BL	VERMONT COMPOSITES	S4
BL	VERMONT FLEXIBLE TUBING	S4
BL	VERMONT TUBBS - FORESTDALE	F4
BL	VERMONT TUBBS - RUTLAND	F4
BL	VERMONT WHEY COMPANY	
BL	YORK ELECTRONICS CORP	
L	CHEMFAB	S1
L	DECART	S4
L	GEORGE ADAMS & COMPANY	S4
L	GREEN MOUNTAIN WOOD PRODUCTS	F4
L	HOUSE OF TROY	S1
L	MACE SECURITY INTERNATIONAL	
L	QUESTECH METALS	F4
L	S. B. ELECTRONICS	S4
L	SKYLINE CORPORATION	S1
L	STELLA FOODS	F4
L	VERMONT PRECISION WOODWORKS	F4