



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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Environmental Compliance in Connecticut

Prepared for
Connecticut General Assembly Committee on the Environment

by
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It is the mission of the Department of Environmental Protection to conserve, improve, and protect the natural resources and environment of the State of Connecticut; to control air, land and water pollution in order to protect the health, safety and welfare of the people of Connecticut; and to preserve and enhance the quality of life for present and future generations.

Introduction

Section 4 of Public Act 97-314 requires the Department of Environmental Protection to submit a report to the joint standing committee of the General Assembly having cognizance of matters relating to the environment on compliance and enforcement activities conducted by the Department. Specifically, the Act requires that the report provide information on permit compliance, enforcement actions, compliance assistance activities and environmental performance in general. This is the second such report prepared by the Department of Environmental Protection. The following report attempts to summarize the past year's efforts and put them in context with the Department's mission and its role in an evolving environment.

As discussed in last year's report, the business of environmental protection continues to mature and evolve. Nevertheless, by any objective measure Connecticut's environment and natural resources continue to grow stronger and healthier. Last year's report provided extensive historic information on the environmental "State of the State" in Connecticut. Rather than repeat that information here, interested parties may consult Appendix I to review historic information as presented in the February, 1998 report.

The Department of Environmental Protection strives to achieve the highest level of environmental protection for the citizens of Connecticut by use of traditional regulatory controls - a combination of establishing standards, authorizing activities, and enforcing compliance with those standards and authorizations - together with financial, regulatory, and technical compliance assistance. The Department is committed to enforcing applicable law by means of administrative orders and lawsuits when serious violations or chronic or recalcitrant violators are involved, while at the same time promoting compliance assistance in its planning, permitting, and enforcement programs.

While recognizing that enforcement is only one method to assure compliance, review of statistical trends in enforcement activity is useful and informative. For the past five years, traditional enforcement activity has remained constant:

Enforcement Action	1998	Five-year Average
Referrals	67	63
Administrative Orders	124	115
Notices of Violation	1293	1037

More than at any other time in the Department's history, new and innovative approaches are needed to maximize environmental compliance. Today, unlike earlier in the agency's history, the Department is rarely confronted by gross pollution from a limited number of large sources. With the support of the public and its lawmakers, the number and type of potential sources of pollution subject to environmental regulation has multiplied. In response, traditional strategies of ensuring environmental compliance have been augmented by dramatically greater proactive assistance efforts by the Department. These assistance efforts share with enforcement the goal of assuring environmental compliance. They also draw upon the same staff and financial resources. The Department has channeled considerable energy and resources into cooperative efforts such as EPA's StarTrack Program, the GreenCircle Awards and multimedia pollution prevention workshops for automobile repair and refinishing shops, lithographers, and metal finishers. Outreach and technical assistance has also been provided to vocational educational schools which teach automotive maintenance, academic laboratories, hospitals and multi-tenant property managers, to name a few. In light of their success, the Department is committed to further supplementing traditional enforcement with financial, regulatory, and technical compliance assistance efforts, including the facilitation and promotion of pollution prevention techniques to produce a comprehensive compliance assurance program.

As are environmental protection agencies nationwide, we are seeking new ways to measure our successes through the identification of meaningful environmental indicators. In this report, and more so in the future, we focus not only on the statistics regarding our work effort (i.e., numbers of regulatory actions taken) but on the state of the environment.

Much of the success the Department has achieved and will be able to achieve in the future is attributable to its excellent staff. In its June, 1997 multimedia review of the Department's enforcement programs, EPA found that "possibly the greatest strength of the DEP's enforcement programs is the quality of the inspection and enforcement staff. Across all programs, the EPA review team found dedicated professionals who performed their jobs well". The competency and professionalism of staff throughout the Department's many programs has allowed this agency to make steady and significant progress in protecting public health and the environment throughout Connecticut, and to modernize our approach to environmental management and regulation.

Environmental State of the State 1998

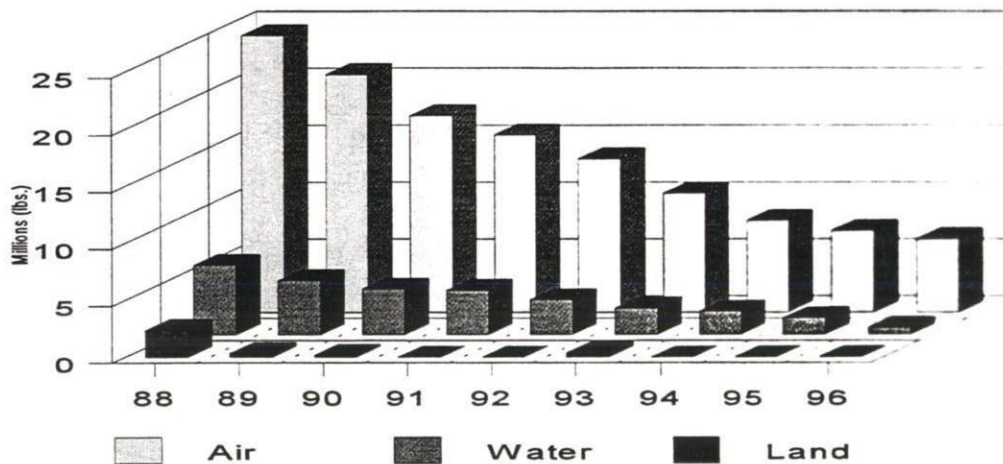
The following highlights reflect recent changes and improvements to Connecticut's environment in the past year:

- Carbon monoxide levels in Connecticut remain well below the National Ambient Air Quality Standard. On May 28, 1998 the Department submitted a request to EPA to redesignate as *in attainment* the southwestern portion of the State, Connecticut's last remaining carbon monoxide nonattainment area. EPA is in the process of ruling positively on this request.
- In July 1997, EPA updated the standard for ground-level ozone for the first time in twenty years. The new 0.08 parts per million, 8-hour ozone standard provides better protection of public health by considering the effect of longer exposure periods to elevated ozone concentrations. Under the new more stringent standard, Connecticut experienced 25 "*unhealthful*" days during 1998 compared to 26 in 1997.
- At the same time the ozone standard was updated, EPA also updated the standard for particulate matter. In addition to focusing on coarse particles 10 micrometers in diameter or smaller (PM10), EPA added a new particulate matter standard for fine particulate (PM2.5). This new standard required the development of a new monitoring network which began in 1997 and began full scale operation in 1998 with 15 *fine particulate monitors now in operation*.
- The Department has been working with the Northeast States for Coordinated Air Use Management to develop a program to target reductions of air toxics throughout the region. Connecticut is serving as the project lead and anticipates that this effort will significantly improve the scientific understanding of air toxics and emission reduction opportunities. In 1998, the Department *initiated a three year research and monitoring effort to characterize levels of toxic air pollutants* throughout the state. Sampling will begin soon at sites in Connecticut.
- The Department continues to aggressively pursue its goal of restoring all waters that remain classified as "impaired" under our Water Quality Standards. In 1997, 267 miles of Connecticut's waterways were classified as not fully supporting their designated uses - uses which include swimming, aquatic life protection and fish consumption. During 1998, *an additional 11 miles in the Housatonic River basin alone were upgraded* from partially supporting to fully supporting their designated uses.
- In anticipation of the December, 1998 deadline for removal of all non-residential bare steel underground storage tanks (UST) containing petroleum products or

hazardous substances, the UST Enforcement Program provided outreach, including the mailing of close to 3,000 "Request for Information" letters to facilities with bare steel tanks registered as active. As a result, *over 1700 USTs are now registered as permanently closed.*

- Model Integrated Pest Management (IPM) programs were initiated at schools and the IPM subcommittee of the Waste Bureau advisory committee *developed recommendations for notification of parents or guardians of schoolchildren when pesticides are applied in schools.* The recommendations were provided to the General Assembly's Environment Committee in January, 1999.
- The municipal solid waste recycling rate in fiscal year 1997 *increased to 25%,* compared to 23% in fiscal year 1996 and about 19% in 1992.
- Initiated in 1988, the Toxics Release Inventory (TRI) contains information about releases and transfers of more than 650 toxic chemicals and compounds to the environment. Approximately 500 TRI reporting forms are filed in Connecticut each year. The TRI public reporting requirements create a powerful motivation for industry to reduce their use of toxic chemicals. The TRI and resulting increase in public awareness of the use of toxic chemicals has contributed to a remarkable *82% drop in the amount of toxic chemicals released into Connecticut's environment since 1988.*

Toxic Release Inventory Air/Water/Land In Connecticut



- An indication of the improving health of Long Island Sound is demonstrated by the significant rise in catch of both striped bass and lobster. For example, from 1990 to 1996 the recreational catch of striped bass in Connecticut waters *rose from 160,000 to over one million fish.* For lobster, the combined catch from Long Island Sound of New York and Connecticut lobstermen *rose from 3.5 to 6.2 million pounds during the same period.*

Permit Compliance

The Department of Environmental Protection uses a variety of regulatory devices for assuring protection of the environment. Through regulations, permits, licenses, authorizations, certifications, etc., the Department authorizes and controls the discharge and emission of potential pollutants, allows the construction of structures or other alterations of the landscape, and regulates the operation of certain facilities in a manner that avoids adverse environmental impacts and poses the minimum threat to the environment. These permits and other authorizations dictate the levels of emissions, set conditions for operation, and impose management practices that, when complied with, are designed to prevent pollution of the air, water and other natural resources of Connecticut.

Number of Authorized Activities

The following table shows the breakdown of current activities by authorization type:

Number of Active Permits/Authorizations/Licenses/Registrations	
Individual Permits	5,357
General Permits Categories Activities Authorized	35 6,272
Certificates of Permission	442
Other Authorizations	268
Registrations	59,448
Professional Licenses	12,322
Department-wide totals	84,109

The following analyses provide some measures of permit compliance across the various programs the Department administers:

Air Management Bureau: Stationary sources with Continuous Emission Monitoring (CEM) equipment have a demonstrated compliance level of 99% for the calendar year. CEM is increasingly being used to ensure continuous compliance with federal and state requirements. Within the next one to two years at least eleven new major sources, including combine-cycle gas turbines, sewage sludge incinerators, industrial boilers, and a soil incinerator, will be required to use continuous emission monitoring systems to determine compliance. This represents about a 25% increase over facilities currently utilizing continuous emission monitoring.

In 1998, notices of violation were issued for less than 1% (9) of the 1,964 existing New Source Review Permits. An additional, 90 notices of violation were issued for failure to have applied for New Source Review permits in the calendar year 1998.

In the federal fiscal year ending September 30, 1998, the Air Bureau found 13%, or 17 of 129, of General Permit to Limit Potential to Emit (GPLPE) sources inspected were found to be out of compliance. Enforcement response for these sources is being developed in 1999.

Waste Management Bureau: For the purpose of assessing compliance with environmental permits, the Waste Management Bureau evaluated the universe of permitted solid waste and hazardous waste facilities inspected during 1998. The following categories of facilities are included in this assessment: hazardous waste treatment, storage and disposal facilities; and solid waste volume reduction facilities, resource recovery facilities, intermediate processing centers, transfer stations, and land disposal facilities (ash residue, municipal solid waste, bulky waste and special waste). The percentage of permitted solid waste and hazardous waste facilities operating in full compliance with their waste permits in 1998 is approximately 72%. Given available resources, all permitted facilities are not inspected annually. Of the 264 permitted facilities inspected in 1998, 190 facilities were compliant and 74 facilities were determined to be non-compliant with their permit.

Water Management Bureau: In the Water Management Bureau, compliance with permits is measured in several ways. First, field staff perform compliance inspections evaluating the permittee's adherence to all required conditions of the permit, including, at a minimum: sampling, analysis, record keeping, reporting and treatment system operation and maintenance. Additionally, samples are taken by field staff to determine if the facility's discharge is in compliance with permit parameters on the day of the inspection. If any significant violations are found, a Notice of Violation (NOV) is sent out requiring a response and correction of the problems within a prescribed period of time.

Industrial facility compliance rates expressed as a percentage of notices of violation issued versus inspections conducted

Year	Total Inspections	NOVs Issued	% Compliance Rate
93-94	295	89	70%
94-95	275	74	73%
95-96	273	39	86%
96-97	288	42	85%
97-98**	296	52	82%

**July 1, 1997-September 30, 1998

Similar inspection and follow-up efforts in the subsurface sewage permitting and stormwater permitting sections have also yielded good results. In late 1997, a survey of monitoring reports required of subsurface discharge permit holders found that only 19% (35 out of 177) were in compliance with monitoring requirements. As a result, NOV's were sent to 142 facilities. The compliance rate quickly increased to 55%, and follow-up efforts have resulted in further increases to over 70% by December 1998. Enforcement resources in 1999 will be directed at facilities remaining in non-compliance.

In 1997, a survey of stormwater permittees found approximately 30% compliance with the monitoring requirements of the stormwater general permit. NOV's were sent out, and, in 1998, 77% (918 out of 1195) were in compliance with monitoring requirements. Follow-up actions will be taken against facilities remaining in non-compliance, including formal enforcement where warranted.

Compliance with discharge permits is also measured through the tracking of self-monitoring data that permittees send to the Department. This data for major surface water dischargers is entered on a tracking system maintained by EPA, and data for major dischargers to sewage treatment plants is entered into a state system.

- For major surface water dischargers, EPA reports that in 1998 the rate of significant non-compliance among National Pollutant Discharge Elimination System ("NPDES") majors in Connecticut ranged from 15-25%. Broken down by category, significant non-compliance at the 45 industrial facilities classified as NPDES majors was in the 7-20% range; at the 63 municipal facilities classified as NPDES majors, significant non-compliance was in the 19-25% range. (Note: criteria for "significant non-compliance" are set by EPA in terms of the degree of exceedance over the permit limit.)
- Accurate data on compliance rates for major dischargers to sewage treatment plants is available to the Department for the first time in years. The state data system was repaired last year and discharge monitoring report (DMR) information was entered into the system. Analysis of this data indicates that 14% of the major dischargers to sewage treatment plants were found to be in significant non-compliance. However, violations identified include very few significant effluent problems and effluent problems deemed serious are being addressed by ongoing or pending enforcement actions. The other types of problems identified are best characterized as relatively minor effluent quality violations, plus many instances of non-reporting, or use of inappropriate sampling methods. Reporting and analytical violations which are considered serious by the Department will be followed up with formal enforcement action.

Conclusion

The Department currently authorizes over 80,000 activities through its individual permits, general permits, registrations, professional licenses and other forms of authorization. Permit compliance rates vary widely depending upon many factors, including but not limited to the age of the particular regulatory program and the nature of the activity being regulated. Where widespread permit non-compliance is identified in a particular program, the Department targets enforcement and compliance assistance efforts to elevate compliance rates.

Enforcement Actions

Introduction

The goal of the Department's enforcement programs is to improve and protect the environment by accomplishing the following: (1) prevention and prompt cleanup of pollution and its sources; (2) protection and restoration of natural resources at the site where a violation occurs and at other sites; (3) protection of public health and safety; (4) prompt compliance with legal requirements that have been violated; (5) deterrence specific to the individual violator and to the regulated community as a whole; (6) removal of any economic advantage or savings realized by noncompliance; and (7) punishment of violators.

Traditional enforcement remains the primary tool the Department relies upon to ensure compliance with environmental laws. The Department employs in the most efficient and appropriate way the full range of administrative, civil and criminal enforcement tools and remedies. We strive to respond to violations in a fair, predictable, and appropriate manner as determined by the scope, duration, seriousness and willfulness of the violation. The Department will not succeed in its efforts to maximize compliance and promote "beyond compliance" behavior without a strong enforcement presence. Enforcement actions reduce or eliminate environmental and human health risks and ensure an economic "level playing field" between those who fail to comply and those who chose to comply.

Statistical Trends In Enforcement

Overall, 1998 enforcement statistics reflect a continued commitment to traditional enforcement to achieve the cleanest, safest environment possible for Connecticut's citizens. In 1998, the Department's inspection staff conducted more than 14,000 inspections. And, despite limited means, extensive management and staff involvement in the Legislative Program Review and Investigations Committee's study into Department Enforcement Policies and Practices, and myriad compliance assistance initiatives drawing upon many of the same resources, calendar year 1998 combined enforcement outputs for the Air, Waste and Water Bureaus exceed the 1994-98 five year average in every significant statistical measure:

- notices of violation (NOVs) issued (1293 compared to a five year average of 1037);
- administrative orders issued (124 compared to 115);
- referrals (67 compared to 63) made to the Office of the Attorney General, the Chief State's Attorney's Office or the federal EPA.

In 1998 the Department collected over \$1.92 million in combined administrative fines and supplemental environmental projects, up from \$1.67 million in 1997. The amount of penalties assessed in civil judgments following referral to the Attorney General also rose

in 1998, from a little over \$5 million dollars in 1997 to nearly \$7 million dollars in 1998 (the amount actually collected may be less). The year saw the Chief State's Attorney's Office become a much more active participant in environmental enforcement. A unit dedicated to environmental crimes and staffed full time by a prosecutor and inspector has been created in the Statewide Prosecution Bureau of the Chief State's Attorney's Office. Three cases were referred by the Department to the Environmental Crimes unit in 1998.



State of Connecticut
Department of Environmental Protection

1998 Enforcement Statistics - Annual Summary

(Rev. 01/27/99)

Actions	Air Management Bureau	Water Management Bureau	Waste Management Bureau	Office of Long Island Sound Programs	Total for year ¹ (1/1/98 - 12/30/98)
Warning Notices Issued under CGS §22a-6s	N/A	N/A	23	N/A	23
Notices of Violation Issued ²	338	477	461	17	1293
Consent Orders Issued	22	35	33	7	97
Administrative Penalties Assessed (# of cases)	\$104,000.00 (5)	\$430,248.00 (13)	\$415,184.00 (24)	\$29,500.00 (6)	\$978,932.00(48)
Supplemental Environmental Projects (# of cases)	\$85,000.00 (1)	\$255,450.00 (6)	\$634,313.00 (10)		\$ 974,763.00 (17)
Unilateral Orders Issued	5	19	3	0	27
Attorney General Referrals	10	16	26	0	52
Judicial Assessments					
Penalties	\$1,040,000.00	\$2,179,500.00	\$3,757,005.00	\$0.00	\$ 6,976,505.00
Supplemental Environmental Projects	\$0.00	\$500,000.00	\$0.00	\$0.00	\$500,000.00
Chief State's Attorney Referrals	0	1	2	0	3
Referrals to EPA	0	0	12	0	12
Inspections Conducted (including complaint investigations)	8,357	1,734	3,023	978	14,092

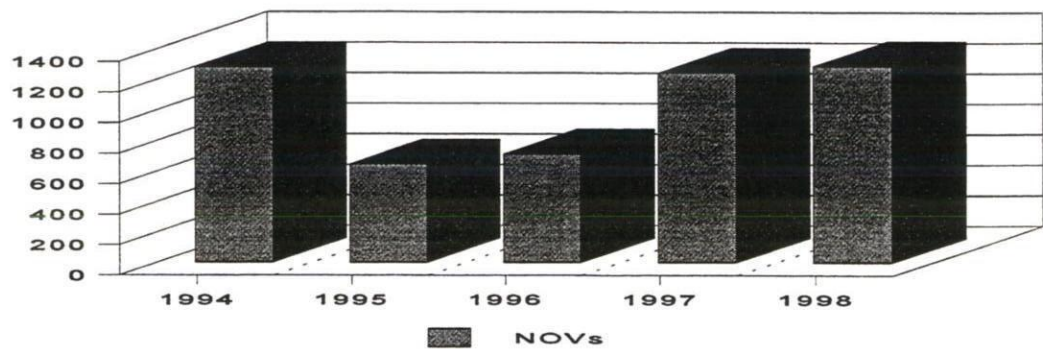
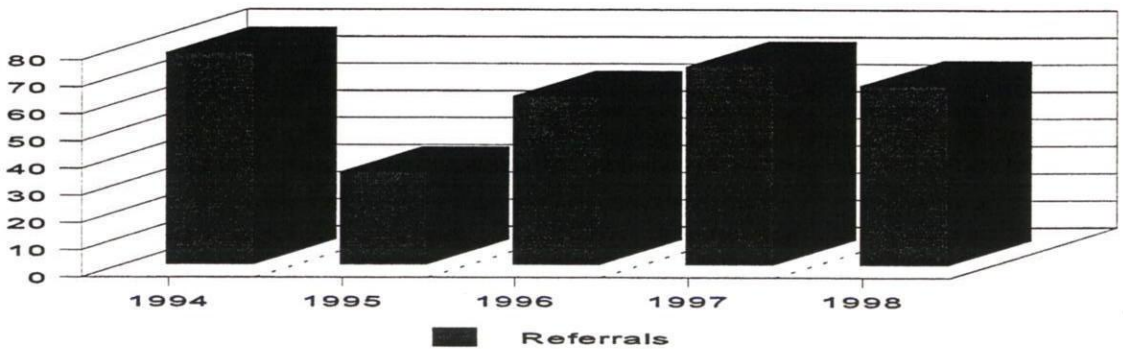
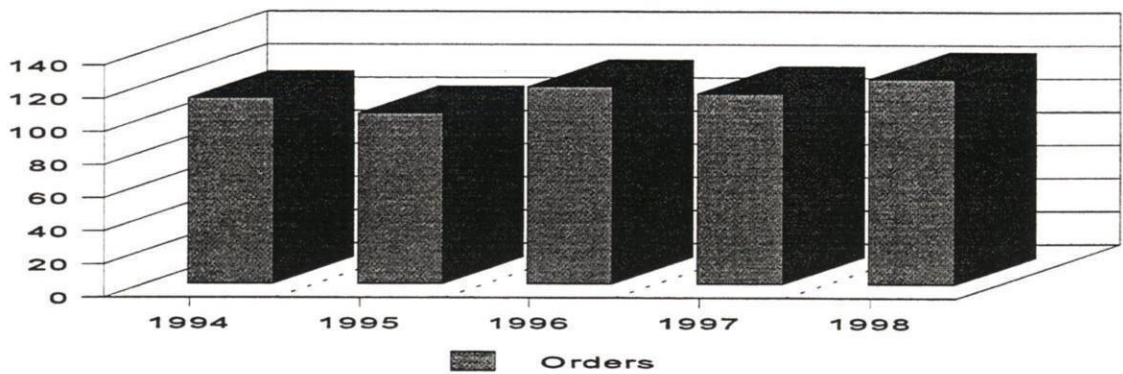
¹ Due to multi-media cases, totals may not reconcile with bureau specific statistics

² As used in this table, Notices of Violation include NOV's issued by Program Directors, field-issued citations and warning letters.

Enforcement Statistics 1994-1998 Department-wide

	1994	1995	1996	1997*	1998*	Five Year Average
Referrals (AG/EPA/CSA)	78	34	62	73	67	63
Orders	112	103	119	115	124	115
NOVs	1284	648	714	1247	1293	1037

*including the Office of Long Island Sound Programs



**Enforcement Statistics 1994-1998
Air Management Bureau**

Program Activity	1994	1995	1996	1997	1998	Five Year Average
Warning Notices						
Notices of Violations	708	92	139	290	338	313
Orders	30	27	57	32	27	35
Referrals (AG/ EPA/CSA)	5	4	6	5	10	6

**Enforcement Statistics 1994-1998
Waste Management Bureau**

Program Activity	1994	1995	1996	1997	1998	Five Year Average
Warning Notices			31	19	23	24
Notices of Violations	357	427	443	514	461	440
Orders	36	29	25	32	36	32
Referrals (AG/ EPA/CSA)	59	20	39	46	40	41

**Enforcement Statistics 1994-1998
Water Management Bureau**

Program Activity	1994	1995	1996	1997	1998	Five Year Average
Warning Notices				3		
Notices of Violations	219	129	132	441	477	280
Orders	46	47	37	42	54	45
Referrals (AG/ EPA/CSA)	14	10	17	20	17	16

Enforcement Priorities

In a time of limited resources, the Department is committed to using its enforcement authority wisely, at all times seeking to produce the maximum benefit to the environment with each action we take. The Department, through its Enforcement Response Policy, prioritizes its enforcement resources by focusing on the most significant environmental, human health and noncompliance problems. Two categories of violators deserve and get the most attention from our enforcement staff. The first category of violators are those whose violations pose the greatest risk to public health and the environment within the State. The laws the Department enforces are intended to protect the public health and the environment from harm. Thus, the most important purpose of enforcement is to prevent and abate harm to human health and the environment resulting from a violation, and to require the violator to return to compliance promptly.

The second category of violators subject to heightened enforcement is the chronic or recalcitrant violator. Chronic or recalcitrant violators are those demonstrating a pattern or practice of noncompliance with environmental laws; review of a chronic or recalcitrant violator's compliance history indicates a general unwillingness or inability to comply with applicable requirements. Repeated violations or failure of a violator to quickly correct violations in the past or present may also characterize a particular violator as a high priority for enforcement action.

Conclusion

The Department recognizes that a strong, credible enforcement program is critical to our mission to conserve, improve and protect the natural resources and environment of the State; to control air, land and water pollution in order to protect the health, safety and welfare of the people of Connecticut; and to preserve and enhance the quality of life for present and future generations. The Department possesses such a program. Traditional enforcement activity remains the cornerstone of the Department's compliance assurance efforts, especially in cases involving serious violations or chronic or recalcitrant violators. In combination with newer compliance assistance and pollution prevention activities, the Department's efforts have resulted in, and will continue to produce, a cleaner and safer environment for all of Connecticut's citizenry.

Finally, the exhaustive study in 1998 of the Department's Enforcement Policies and Practices by staff of the Legislative Program Review and Investigations Committee produced numerous recommendations which will, when acted upon, make the Department's enforcement programs stronger and their efforts more productive. Therefore, in response, the Commissioner has created an Environmental Program, Policy and Practices group within the Assistant Commissioner's Office. Four longtime

enforcement staff with more than 30 years of collective enforcement experience have been assigned on a full time basis to guide the Department through substantive changes responsive to the report and beyond.

More specifically, this group has: (1) assisted in the production of this report; (2) begun to coordinate Department efforts in response to Program Review's report; and (3) assumed projects initiated in response to the June 1997 EPA multimedia review of the Department's enforcement programs. The Environmental Program, Policy and Practices group will also be responsible for:

- producing in final form various enforcement policies and guidance documents, including the enforcement response policy, enforcement action summary, civil penalty policy, case conclusion data sheet, and the compliance history policy;
- producing an enforcement policy and practice desk reference comprising the documents mentioned above along with other appropriate documents to be distributed to each manager and staff person involved in the Department's enforcement efforts; and
- training enforcement management and staff in the proper application of documents contained in the desk reference.

In addition, over the longer term, the group will provide oversight for enforcement activities, evaluate organizational alternatives for enforcement programs based on a review of other states' efforts and make final recommendations on administrative civil penalty regulations.

Compliance Assistance

Introduction to Compliance Assistance

The Department remains committed to achieving the highest level of environmental protection for its citizens by using a combination of traditional and innovative approaches to assure compliance. In June of 1998, the Commissioner formed the Division of Environmental Assistance and Outreach (DEAO) to coordinate assistance efforts throughout the agency and to provide a central point of access for all stakeholders including the public, government and businesses. Two of the programs within the division, the Office of the Ombudsman and the Small Business and Compliance Assistance Program, are especially focused on compliance assistance activities for business. Some of the primary objectives in establishing a centralized office include:

- pursuing a multi-media approach to compliance assistance;
- improving coordination between the Bureaus in the delivery of compliance assistance;
- promoting strategic planning for compliance assistance and pollution prevention;
- focusing on industry sectors and multi-media approaches for compliance assistance and pollution prevention.

Compliance assistance activities are not new at the Department and some programs have provided compliance assistance as a matter of course for a number of years. However, more and more businesses are subject to environmental regulation and they are often small businesses captured by new standards and requirements. Many of these small businesses truly want to comply with environmental requirements but need access to information and an increased level of assistance to reach that goal. The Department has found that small business multi-media assistance is more effective if it addresses all areas of environmental concern.

Compliance assistance complements, but does not replace, traditional enforcement. By providing clear and consistent information on regulatory requirements, compliance assistance is an important mechanism to insure that the regulated community understands its obligations and has the necessary tools to implement effective solutions. It is important to note that most assistance activities are pursued by the Department through the use of existing resources. In many cases these projects are launched as pilots without any additional state or federal funding. Many of these projects enable the Department to develop compliance tools tailored to specific compliance objectives for entire categories of regulated sources. These activities also provide an opportunity for piloting alternative approaches to compliance that can be evaluated and, if necessary, modified prior to full-scale implementation throughout the Department.

Compliance Assistance Guidance Documents

The Department's Compliance Assurance Policy includes a compliance assistance guidance document as a resource to the Bureaus and the Office of Long Island Sound Programs in the development of compliance assistance initiatives. Each Bureau is encouraged to promote compliance assistance which:

- addresses a well-defined compliance problem susceptible to remedy by compliance assistance;
- has measurable environmental benefits;
- fulfills a strategic goal;
- complements other Department efforts;
- is multimedia in nature or brings more companies subject to the regulation into the regulated community; and
- incorporates pollution prevention.

Inventory of Compliance Assistance Activities

An agency-wide compliance assistance subcommittee has been in existence for two years and continues to provide a forum for coordinating activities and developing Department-wide assistance plans. The Department continues to inventory all compliance assistance activities currently proposed or underway as a method to identify opportunities for improved multi-media coordination (See Appendix II). The inventory has helped provide a more holistic presentation of assistance to the regulated community and also has provided a mechanism to improve coordination and alignment with EPA on proposed assistance activities in Connecticut. During 1998, the Department held several meetings with EPA's Office of Environmental Stewardship to discuss assistance priorities on both the state and federal levels. While there are many areas for further improvement, these steps are helping to improve the delivery of assistance efforts to the regulated community in Connecticut.

Targeting Compliance Assistance

The Department continues to target assistance toward specific, well-defined compliance objectives. Targeted, pre-planned assistance initiatives have yielded measurable increases in compliance. The automotive services sector was chosen as a priority sector for 1998, and a second sector, Government and Institutions, has been designated as a priority for 1999.

Examples of Compliance Assistance Tools and Initiatives

Compliance assistance can take many forms including but not limited to, providing person to person information and assistance on regulatory requirements, conducting seminars and workshops, as well as financial assistance. In almost all cases, compliance assistance represents a resource investment at the "front end" and is designed to encourage the regulated community to act proactively to comply with environmental laws and regulations. The following are compliance assistance tools that were developed and distributed during 1998.

- **Compliance Guides** - The Department continues to emphasize plain-language guides to environmental regulations as a mechanism to help the regulated community understand what they need to do to comply. Some of the materials developed for distribution include:

Fact Sheets - Specific sector-based fact sheets have been developed for: municipal public works garages; academic laboratories; automobile junk yards; lithographers; dry cleaning (available in English and Korean); "Pit Stops Fact Sheets" for automotive services; recycling for waste haulers; grass disposal ban requirements; recycling for schools; and a pollution prevention case studies.

Technical Assistance Documents - Technical assistance documents were developed for municipal public works garages with plain language explanations of the federal Resource Conservation and Recovery Act program and best management practices for hazardous waste management. A compliance manual was also developed for autobody shops as part of assistance efforts focused on compliance with the Clean Air Act. In addition, a pollution prevention manual was developed for vocational educational schools which teach automotive maintenance.

Substantial efforts were made toward revising the Connecticut Guidelines on Soil Erosion and Sediment Control, a document which is used in the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities and in the implementation of other land use/water resource statutes and laws such as inland wetlands, planning and zoning, water diversion, tidal wetlands and dam safety. Target date for publication is the year 2000.

Compliance Information Packages - Several compliance information packages were developed to pull together all the requirements for a specific industry. Packages for auto refinishing, lithography, dry cleaning and metal cleaning are now available.

The Wetlands Management Section issued its annual advisory regarding amendments to the Inland Wetlands and Watercourses Act in December 1998. The advisory was mailed to all Inland Wetland and Watercourse Agencies (170), this advisory indicates the changes necessary to municipal agency regulations to ensure conformity with the amended act.

- **Seminars and Workshops** - Members of Connecticut's regulated community attended Department workshops on various topics, including: permitting requirements under the Clean Air Act; water discharge permitting; hazardous waste management; pit stops; recycling in small businesses; energy conservation; pollution prevention; training in pollution prevention process mapping; underground storage tank compliance for gas stations/auto repair shops; and community use of integrated pest management. The Water Bureau has been very active in sponsoring and co-sponsoring seminars and workshops. Water Bureau staff participated in 28 outreach events reaching approximately 2,000 attendees. Seminar topics included: Wetland administration, dam safety, flood hazard mitigation, hazardous mitigation planning and Connecticut's flood warning system.
- **Dedicated Resources** - The Department continues to dedicate significant resources for media specific assistance activities. COMPASS (Compliance Assistance Program) is an outreach service provided by the Waste Bureau to assist Connecticut businesses and industries in complying with waste management regulations. The Waste Bureau Office of Pollution Prevention continues to offer technical assistance to identify opportunities to implement pollution prevention. In addition to the seminars and workshops listed above, assistance provided through these programs during 1998 included operating a toll-free hotline, and on-site assistance. Small businesses and others that have taken advantage of these services include: autobody shops; gas stations; dry cleaners; metal finishers; printers; multi-tenant property managers; hospitals; universities; and schools.

Major Compliance Assistance Initiatives

- **Compliance Assurance Initiative for Autobody Shops** - This pilot project was initiated by the Air Management Bureau in 1995 and included a series of strategies designed to assist autobody shops in Connecticut with obtaining air quality permits, where necessary, as well as multi-media compliance. This initiative included on-site assistance, seminars and workshops and the development of a plain-language compliance manual. A major goal of this initiative was to assist small autobody shops in submitting completed permit registrations for the March, 1998 deadline. Several assistance components were coordinated over a three year period to ensure

small autobody shops had access to the necessary tools to achieve compliance. The Bureau's investments in this area have yielded an important correlation between outreach and compliance. As of this writing a total of 457 permit registrations have been received. Of that number, 200 were received in March, 1998, immediately following an intensive outreach effort emphasizing the need to comply with the upcoming deadline.

- **Hartford Neighborhood Environmental Project** - Through this project the Department continues to partner with community organizations, institutions and small businesses in working together to enhance the economic opportunities, environment and quality of life in Hartford neighborhoods. Activities include conferences, workshops, training sessions, on-site multi-media inspections, educational materials and other related neighborhood outreach mechanisms.
- **On-site Recycling Assistance** - The Department initiated inspections at solid waste facilities to determine whether significant quantities of recyclables are being disposed in violation of the state's mandatory recycling program. A large number of notices of violation were given to haulers who were also provided with information about their responsibilities under the recycling statutes. In addition, the generators of the recyclables, primarily schools and businesses, were identified. Recycling staff then visited these generators and offered on-site compliance assistance.
- **The Environmental Network** - The Department participates in the Environmental Network whose members also include: Briarwood College, Capital Community Technical College, CBIA, CDA, CERC, Connecticut Innovations, ConnSTEP, DECD, and the Manufacturing Alliance of Connecticut. The purpose of the network, which was established in 1998, is to provide easy and direct access to environmental and economic resources in Connecticut.
- **Electronic Tools** - A computerized program was developed to assist autobody shop owners in calculating chromium emissions and evaluating compliance with Connecticut's hazardous air pollutant regulation. The model stormwater pollution prevention plan for industrial activities is now also available in an electronic format. Approximately 70 large quantity generators of hazardous waste filed their biennial reports using software provided by EPA.
- **Advisory Groups** - The Department now has well-established advisory groups for its environmental quality programs. SIPRAC (State Implementation Plan Revision Advisory Committee) focuses on air issues - meeting topics have covered the full range of issues affecting clean air, including implementation of the Title V Operating Permit Program, revisions to the New Source Review regulations, planning efforts focused on reductions of Mercury emissions, and compliance with the new ozone

and fine particulate matter standards. SIPRAC subcommittees continue to play an integral role in the regulatory development process and in providing recommendations for program development. During 1998, three subcommittees have been particularly active: New Source Review, Emissions Credit Trading, and a newly formed subcommittee on Record Keeping and Reporting to evaluate Bureau-wide requirements. A representative of the regulated community and a representative from the environmental community continue to serve as SIPRAC co-chairs. In addition, the Small Business Compliance Advisory Panel (CAP) provides a dedicated forum for small businesses on air, and other, environmental issues. The CAP met twice during 1998 and has provided input on several compliance assistance initiatives including proposed activities by EPA.

During 1998, the Bureau of Water Management's Advisory Committee convened on six occasions. The Committee received updates and held discussions on topics including: the requirements of newly drafted or revised general permits; enforcement efforts and procedures; nitrogen removal initiatives for Long Island Sound; development of the list of impaired water bodies and plans to adopt Total Maximum Daily Loads (TMDLs); legislation and regulations; water diversions; aquifer protection; and the bureau's strategic plan for 1999-2001. As a result of input received from members, the Bureau participated in several general permit workshops and formed subcommittees to work on drafts of the aquifer protection, land use and water discharge permit regulations and to address issues involving water discharge applications.

The full membership of the Waste Bureau Advisory committee met four times in the past two years. Most activities have been pursued within the context of subcommittees, the majority of which meet once a month. The subcommittees have issued four final reports: "Recommended Strategy for Release Reporting"; final comments regarding proposed changes of the Connecticut's hazardous waste regulations; guidance for the beneficial use of solid waste; and recommendations for a strategy for proper disposal of municipal solid waste. The advisory committee process has also been instrumental in developing a strategy to promote the concept and practice of integrated pest management in Connecticut including a public outreach campaign and school demonstration projects. Through this effort a model integrated pest management plan has been developed and prepared for distribution in the public schools. Other subcommittees have been formed and continue to provide recommendations to the department on regulatory matters such as consolidation of the regulated and special waste programs and the Connecticut solid waste management plan. A new subcommittee has recently been formed to deal with the management of hazardous waste which can be classified as universal waste.

Outreach continues to be a major focus of the waste bureau advisory committee. Seven presentations were made in 1998, including the following topics: "Close the Loop Amazing Recycled Products", "Regulatory Requirements Applicable to Underground Storage Tank Facilities", "Introduction to Integrated Pest Management Program" and an "Introduction to National Environmental Justice Advisory Council".

- **General Permits** - The Department continues to use general permits and other expedited mechanisms to permit minor activities. In the past year general permits have been developed to cover discharges of swimming pool wastewater, and the general permit for recycling facilities has been revised and reissued.
- **Ongoing Compliance Assistance Activities** - The following compliance assistance initiatives were initiated in 1998 and will continue into 1999.
 - *Automotive Services:*
 - Compliance Assistance and P2 Sector Plan
 - Compliance Assurance Initiative for Automotive Refinishing
 - PPIS Grant with Vocational Technical Schools
 - Development of a Multi-Media Regulatory Compliance and Pollution Prevention Manual
 - *Government and Institutions:*
 - Hartford Neighborhood Project
 - Model Agency Project
 - Computer Software for State Agencies on Title V and New Source Review
 - Bradley Airport expansion
 - *PPIS Grant with ConnSTEP - On-Site Technical Assistance*
 - Working with manufacturers to provide pollution prevention information as part of ConnSTEP'S assistance on efficiency and improved technology.
 - *StarTrack*
 - The Department is continuing its involvement in this pilot program, partnering with EPA and three Connecticut companies to test the concept of compliance assurance and enhanced environmental performance through the expanded use of compliance self-audits, third party certifications, and corporate environmental management systems.
 - *ClimateWise*
 - Recruiting and providing support to Connecticut manufacturers who pledge to improve the energy efficiency of their operations. Climate Wise partner tasks include writing energy efficiency plans. Networking of information and mentoring will be added in 1999-2000.

- *NICE3*
Federal grant program, administered through the Department, which provides funding to companies for innovative technologies which improve manufacturing processes through reduced energy use and/or decreased emissions of pollutants.
- *GreenCircle Awards*
In 1998, the Department initiated this awards program to recognize businesses, institutions, civic organizations and individuals who have undertaken pollution prevention, waste reduction, or other projects promoting natural resource conservation and environmental awareness. In that first year, over 150 awards were given, including about thirty to companies who had undertaken pollution prevention and beyond compliance activities. The 1999 program will be released in mid-February.

Partnering With Other Providers

Partnerships continue to be an important element of success in the Department's compliance assistance efforts. The Department often solicits early input from stakeholders as part of the development of a compliance assistance initiative. The Department's advisory groups continue to play an important role in providing suggestions on how to effectively structure compliance assistance initiatives. The Department continues to partner with the Connecticut Metal Finishers Association in the development of an annual conference. In 1998, the Department began to work with the Copper Developing Association to engage in cooperative research to reduce the effects of copper in the environment. The Department also actively participates in regional initiatives which lead to coordinated approaches to environmental compliance among the northeastern states. An example is the Mercury Action Plan which was adopted by the Eastern Canadian Premiers and New England Governors in June 1998 and which outlines compliance and education strategies to reduce anthropogenic emissions of mercury in the region.

Measures of Environmental Performance

To meet Connecticut's emerging environmental challenges the Department has increased the emphasis on more effectively linking program activities with improved performance and environmental results. This movement is exemplified by the establishment of a particular regulatory innovation - the National Environmental Performance Partnership Agreement (NEPPS). The implementation in Connecticut of a wide array of federal environmental requirements has presented countless challenges to state programs. New requirements have brought thousands of small sources into the regulatory arena, while simultaneous fiscal cuts on the federal level have resulted in diminished levels of funding support. Many states find themselves in the midst of major programmatic shifts but dependent on antiquated management systems that no longer serve current needs, using historical performance measures that no longer reflect program accomplishments, and compartmentalized program evaluations which do not adequately take into account all interrelationships of a successful and holistic program.

National Environmental Performance Partnership System (NEPPS)

In 1997 the Department entered into a new state/federal relationship through the National Environmental Performance Partnership System (NEPPS). The key components of NEPPS are the Performance Partnership Grant (PPG), the Performance Partnership Agreement (PPA) and the Core Performance Measures (CPMs). In many respects, this new partnership approach represents a fundamental departure from the traditional process of federal oversight of state environmental programs. It focuses on establishing collaborative partnerships, achieving greater environmental protection, better measurement of environmental progress, and more efficient use of public resources.

Among the benefits the state and EPA envision through this process is an environmental management approach which more effectively links program activities with improved performance and environmental results. This approach comports with the Department's prior reports to the Environment Committee which emphasized enforcement and compliance assistance as tools to achieving better environmental performance and results as opposed to merely goals in and of themselves. Measures of success of the Department's efforts to ensure compliance with the laws and regulations that protect human health and the environment are not necessarily best depicted through traditional measures of enforcement such as the number of inspections conducted or the number of administrative orders issued. Rather, the success of the Department in fulfilling its mission to protect the public health and welfare and to conserve, improve and protect the natural resources of the State is more accurately expressed through the development of measures which indicate whether the air or water is cleaner.

Core Performance Measures (CPMs)

Under NEPPS, through the Department's Performance Partnership Agreement with EPA New England (PPA), the Department now reports on its programs' performances and environmental results through a hierarchy of measures, comprised of the CPMs. On a national basis, the development of CPMs that has taken place under NEPPS has been successful in focusing both EPA and the states' attention on improving how the Department measures the effectiveness of its environmental protection efforts. A guiding principle in the preparation of the PPA has been a commitment to use the national CPMs as tools to track the progress and success of the Department's programs in achieving environmental results. CPMs include a mix of three types of measures needed to understand environmental programs and their effectiveness: (1) environmental indicators (high level trends describing the environmental and human health condition); (2) program outcomes (measures of program influence or effect); and (3) program outputs (measures of program activities).

Under a 1998 joint statement between the states and EPA, a set of fifteen national core environmental indicators were identified for use, where appropriate, by the states in their PPAs. It should be noted that of the fifteen national core environmental indicators that were in draft form at the time, Connecticut had program responsibility which aligned to seven of the measures and supported the seven in its FY97/98 PPA. In addition, Connecticut's FY98/99 PPA expanded its support of the national core environmental indicators to eleven of the fifteen as a result of the federal Pesticide's program being moved from a categorical grant into the PPG/PPA framework (other core measures fall within the purview of the Department of Public Health).

Regional Effort - New England Goals and Indicators Partnership

Connecticut remains committed to moving towards the use of meaningful measures as the preferred means of judging performance wherever possible. Since 1995 the state has participated in the New England Environmental Goals and Indicators Partnership (NEGIP), a regional forum on issues related to the development and use of environmental indicators. It has been a fundamental goal of the NEGIP process to collaboratively identify a set of indicators to report on environmental quality for the New England region.

Compliance Strategies

In addition to its integrated work program, the PPA contains separate Compliance Strategies for each of the regulatory programs. The compliance strategies describe the Department's compliance monitoring strategies, policies and special initiatives, compliance assistance efforts, and measures of success. The compliance strategies are the strategic planning mechanism for achieving compliance through compliance assistance and enforcement. Compliance strategies provide a mechanism for the Department to

closely align compliance assistance initiatives with enforcement follow up. This approach provides for focused attention on strategic goals such as increased compliance within a specific industry sector. Compliance strategies also provide a mechanism for measuring the Department's performance on specific strategic initiatives and approaches.

However, specific measures of compliance are still under development. At the national level there is a movement to identify and implement an enhanced set of performance measures for enforcement and compliance assistance. Through the development of a National Performance Measures Strategy, U.S. EPA Office of Enforcement and Compliance Assurance has recognized that the current measurement system does not provide an accurate or effective assessment of programmatic activities. The Department has reached the same conclusion and is actively developing better indicators of success that measures compliance as well as environmental performance in more holistic terms.