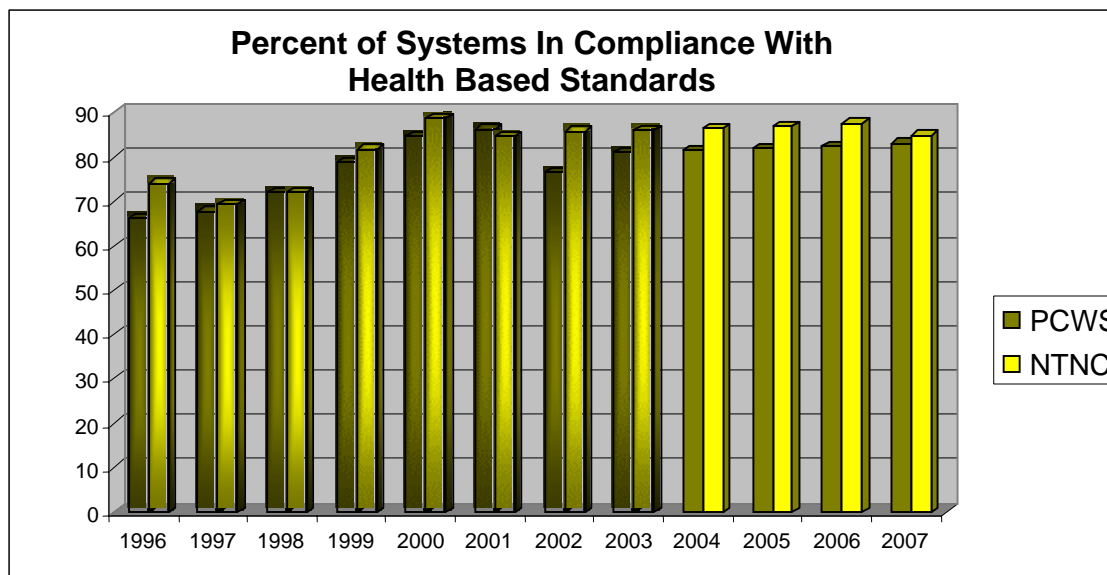


**Results**

Increased protection and development of safe drinking water through operational review of water systems, compliance review and assistance, and enforcement.

**Key Indicators**

Percent of Systems Meeting Performance Based Standards



**Story Behind the Baseline Performance**

Vermont is committed to promoting public water system compliance through providing outreach and technical assistance – conducting sanitary survey inspections, education and training, and certifying water system operators, as well as enforcement action as a last resort. Since January 2004 the division has focused its efforts on TNC water system compliance with the Total Coliform Rule and conducting sanitary surveys, writing sanitary survey letters and issuing operating permits to community and non-transient non-community water systems.

TNCs- The division awarded two contracts effective 4/1/04-3/31/05: one to conduct quarterly monitoring for total coliform bacteria, educate TNCs on sampling technique and monitoring requirements, and the other to provide technical assistance in response to coliform bacteria contamination or system deficiencies. The primary goal of this project is to help TNC staff transition from annual to quarterly bacteriological monitoring; and to help systems find and eliminate any source of contamination. . To date, the project has been as a success in helping TNCs to transition to quarterly monitoring. The Division coordinated coliform and nitrate testing for this project with the Department of Environmental Conservation lab which is reporting all test results electronically to the WSD computer inventory. The Division continues to work closely with the Department

of Health regarding potential health risks and requiring public notice for non-routine situations.

### **Strategies**

#### **Outreach and Education 2004, 2005, 2006**

The Operations and Compliance section educational efforts will continue to provide operator training to Vermont operators. The Water Supply Division will continue to work closely with the NERWA and GMWEA using the funds available under the EPA Expense Reimbursement Grant. Staff will continue to educate water system personnel during the sanitary survey and other onsite meetings or site visits, and provide additional information in the Division newsletter.

#### **Grants and Loans 2004, 2005, 2006**

Grants and Loans affiliated with the Operations and Compliance Section include: 1) Operator training/assistance funded by the EPA Expense Reimbursement Grant; the section will review the ERG work plan annually and continue to reimburse operators for course fees, certification and exam fees; 2) Drinking Water State Revolving Fund Set-aside funding for emergency assistance which will be used on a case by case basis to help water systems facing an immediate crisis; and 3) Drinking Water State Revolving Fund Set-aside funding to fund an expert in water chemistry to provide technical assistance to our surface water systems and ground water systems requiring to modify or install treatment.

Efforts in 2004 also include technical assistance to systems needing to comply with the Stage 1D/DPB rule.

#### **Regulations, Compliance Assistance, Monitoring and Enforcement 2004, 2005, 2006**

(Specific to 2004)

Efforts in this area for the Operations and Compliance Section for 2004 will focus on implementation of Stage 1 Disinfectants and Byproducts Rule and LT1 Enhanced SWTR. Issuing temporary operating permits with milestones serves as the foundation for the Division's enforcement program. In calendar year 2004, the Division will acquire additional temporary staff to eliminate the 397 permit backlog, which will have accrued by 12/31/04.

Compliance assistance continues through sanitary survey inspections, including a written summary of the sanitary survey which outlines system deficiencies; providing technical assistance with operational issues and emergency situations; and automatically generating monitoring schedules for all systems-including the transient non-community water systems.

The Enforcement Workgroup is challenged with prioritizing systems and types of problems for enforcement actions. The group will focus on systems on boil water and do not drink for extended periods of time; systems with major deficiencies who have violated temporary operating permit milestones; unpermitted sources; non compliance with the surface water treatment rules; systems who have failed to conduct water quality monitoring; and non compliance with new federal regulations.

## **NTNC and PCWs sanitary surveys and permits to operate-**

All water systems in Vermont are required to have a permit to operate in place prior to operation. Permits identify system deficiencies and include a compliance schedule. Historically, the sanitarian conducted the survey, wrote the survey letter and issued the permit to operate. Under this scenario, the division has carried a sanitary survey and permit to operate backlog for some time. In January 2004 the division hired two temporary permit writers to write permits and free up field staff to conduct surveys and write survey letters.

The goal of the project is to eliminate the division permit to operate backlog by February 2005. The division has developed an effective process of writing comprehensive permits which clearly and consistently communicate Vermont Water Supply Rule requirements. The permit also serves as an effective tool for moving recalcitrant water systems along to enforcement.

## **Radiological testing in Vermont Schools and Day Cares public water systems**

NTNC water systems are not required to test for radionuclide contaminants per EPA regulations. The division required approximately 150 schools and daycares to test for naturally occurring radioactivity in 2004 because we discovered high uranium levels at one of our schools. One system exceeded the MCL for uranium, a handful of systems reported levels above 10 ppb for uranium, and one system exceeded the MCL for total radium.

### Assessment, Technical Assistance and Direct Services 2004, 2005, 2006

Major efforts in this area for the Operations and Compliance Section include providing on-site technical assistance, (including water quality sampling) to systems with fecal coliform contamination, major deficiencies, or other circumstances potentially affecting the quality and quantity of water and public health of customers served by community, non-transient non-community and transient non-community water systems. EPA provided sanitary survey for all field staff in September 2004 which will enhance our efforts to provide technical assistance.

## Performance Measures

<u>Performance Measures</u>		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number Operator Certificates Issued	P								240	250	250	250	250
	A	299	409	473	184	272	143	435	400	448			
% of NTNC in Compliance with Health-Based Standards	P						76	77	78	83	83	85	85
	A			66.0	72.3	74.3	77	83	83	75			
% of PCWS in Compliance with Health-Based Standards	P						74	77	80	80	82	83	83
	A			68.7	73.7	72.6	80	76	74	75			
% of NTNC Population in Compliance with Health-Based Standards	P						79	81	84	85	87	87	87
	A			73.3	73.6	77.6	82	88	85	70			
% of PCWS Population in Compliance with Health-Based Standards	P					92	93	94	95	90	91	93	93
	A		88.3	92.7	91.3	93	87	91	87	92			
Number of NOAVs issued	P									100	100	100	100
	A	3	8	9	63	274	230	163	61	100			
Number of Monitor Waivers	P				30	30	35	35	35	35	35	35	35
	A	40	28	26	55	62	57	30	35	40			
Number of GWUDI Determinations	P				75	200	200	200	200	350	150	10	
	A	159	117	117	245	131	97	72	98				
% of PCWS Population Issued Timely Monitoring Schedules	P			100	100	100	100	100	100	100	100	100	100
	A	100	100	100	100	100	100	100	100	100			
Number of Enforcement Actions	P									15	15	15	15
	A				3	17	25	7	3	3			

<u>Performance Measures</u>		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number of Sanitary Surveys (PCWS)	P			96	96	100	100	150	150	130	140	150	150
	A	83	111	105	235	116	73	79	74	147			
Number of Sanitary Surveys (NTNC)	P								90	100	70	70	70
	A	26	93	26	29	65	42	104	52	77			
Number of Sanitary Surveys (TNC)	P									35	40	50	50
	A	1	0	1	1	6	38	62	30	193			
Percentage of Systems with Certified Operator (PCWS & NTNC) **	P									99.0	99.2	99.5	99.5
	A	99.3	98.9	99.5	99.5	99.6	99.8	99.9	98.9	98.9			
Percentage of Systems with Certified Operator (TNC) ***	P									80.0	83.0	85.0	85.0
	A								77.19	76			
Systems issued Operating Permits (PCWS & NTNC)	P									100	115	125	
	A	151	146	124	230	214	79	87	80	164			
Systems issued Operating Permits (TNC) *	P									50	75	100	
	A								18	21			

\*2003 is first year for issuing TNC permits

\*\*Starting 2003 NTNC are included in percentage of systems with certified operators

\*\*\*2003 is first year of tracking for TNC systems with operators

### **Proposed Accomplishments**

*Operating Permits Issuance* – Having set goals of completing Groundwater Under the Direct Influence of surface water (GWUDI) determinations for public community water systems and non-transient, non-community systems by the end of 2003, the next task on the list was to address the Transient, Non-Community systems (TNC). The section has set a goal to complete all GWUDI determinations for TNC systems by the end of 2004 .

*Sanitary Surveys* – Staff in the operations program is on their way to meeting their goal of accomplishing complete sanitary surveys over the next 5 years for all PCWS.