

Performance Partnership Agreement

Between the Rhode Island
Department of Environmental Management
And the
US Environmental Protection Agency
Region 1

State Fiscal Years 2006 and 2007
July 1, 2005 through June 30, 2007

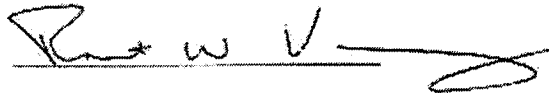
January 2006



This page intentionally blank.

Execution of Agreement

This agreement is hereby entered into this 24 day of ^{February}~~January~~, 2006 and remains in effect until the 30th day of June, 2007, and may be amended by mutual consent.



Robert W. Varney
Regional Administrator
U.S. Environmental Protection Agency
Region 1



cc, Michael J. Sullivan
Director
Rhode Island Department of
Environmental Management

This page intentionally blank.

Table of Contents

| | |
|--|------------|
| Execution of Agreement | 2 |
| Table of Contents | 3 |
| Index of Objectives by Goal | 4 |
| Introduction | 6 |
| Workplans by Goal | |
| Clean Air | 8 |
| Clean and Plentiful Water | 30 |
| Preserve and Restore the Land | 43 |
| Healthy Communities and Ecosystems | 59 |
| Compliance Assistance and Enforcement | 76 |
| Cross Goal Strategies/Open and Effective Government | 89 |
| EPA New England Activities | 99 |
| | |
| <i>Appendix A – Significant Noncompliance Statement.....</i> | <i>105</i> |
| <i>Appendix B – Findings Regarding Massachusetts Wastewater Treatment Facilities Impacting Narragansett Bay.....</i> | <i>106</i> |

APPENDIX B

Findings Regarding Massachusetts Wastewater Treatment Facilities Impacting Narragansett Bay: Need for Abatement of Massachusetts Discharges to the Seekonk River

The Seekonk River is the most nutrient impacted area of Narragansett Bay. This segment currently receives nitrogen loads at a rate 24 times higher than the average loading to Narragansett Bay (24X). Application of the Marine Ecosystem Research Laboratory (MERL) nutrient enrichment gradient studies conducted at the University of Rhode Island indicates that reduction to the 2X to 4X level is required to meet water quality standards.

RIDEM has determined that five MA WWTFs contribute 43% of the WWTF nitrogen loading to the Seekonk River. This evaluation considers nitrogen uptake along the Blackstone and Ten Mile Rivers. RI has developed a phased implementation plan to reduce the discharge of nitrogen from RI and MA WWTFs to the Providence and Seekonk Rivers. The first phase of the nitrogen reduction plan, which includes comparable reductions from Massachusetts WWTFs, will reduce the 95-96 seasonal loading to the Seekonk River by 59%, from the 24X to 10X level. As a result of this plan, the MA WWTFs contribution would represent 59% of the allowable load to the Seekonk; UBWPAD alone would represent 37%. While it is anticipated that further reductions will be necessary, a substantial reduction will be achieved. DEM has proposed the following total nitrogen discharge limits for MA WWTFs along with the requirement to operate the treatment facility to reduce the discharge of total nitrogen, during the months of November through March, to the maximum extent possible using all available treatment equipment in place at the facility, except methanol addition.

| | Monthly Average Total Nitrogen Limit (May-October) |
|-----------------|--|
| UBWPAD | 5.0 mg/l |
| Grafton | 8.0 mg/l |
| Uxbridge | 8.0 mg/l |
| Attleboro | 8.0 mg/l |
| North Attleboro | 8.0 mg/l |

MADEP is opposed to the establishment of permit limits but is willing to work with WWTFs to optimize existing operations to reduce nitrogen their effluent to the extent practicable and has proposed the collection of additional data to evaluate environmental impacts. The MADEP proposal (assuming total nitrogen of 10 mg/l) would only result in a 31% reduction in WWTF loading (the 17X loading condition). This reduction will not be sufficient since the Fields Point Reach of the Providence River exhibits significant signs of impairment from nutrient over enrichment and is currently at the 18X condition. Furthermore, if the MADEP proposal were adopted, MA WWTFs would contribute 76% of the load to the Seekonk River, the UBWPAD WWTF alone, would represent 59% of the loading to the Seekonk River.

After consideration of this information, it is even more apparent that implementation of the loading reductions proposed by DEM are necessary to ensure substantial progress toward achieving water quality criteria in the Seekonk River Providence River and Upper Narragansett Bay, and should not be delayed.

The DEM and EPA Region I must work together to develop and implement a plan for achieving equitable regulation of WWTF discharges to reduce nutrient impacts and achieve acceptable levels of dissolved oxygen throughout the region.

In particular, EPA Region I will develop and implement a plan for establishing the nitrogen discharge limits for the MA WWTFs identified above to ensure equitable regulation of WWTF discharges impacting the Seekonk River, Providence River, and Upper Narragansett Bay.

EPA agrees to work with MADEP and the Town of Swansea to develop and implement a plan to ensure inadequate sewage disposal and other water quality issues documented in the draft interstate Kickemuit River and Reservoir TMDL are properly addressed.

A remaining issue is that MADEP water quality regulations do not recognize the reservoirs located in Massachusetts utilized by Bristol Country Water Authority (BCWA) (Shad Factory Reservoir and Anawan Reservoir) as public water supply waters nor the Kickemuit River (including Swansea Reservoir) as a tributary to a public water supply reservoir. The raw water supply system's evident water quality problems, the critical need to maintain the Kickemuit Reservoir system as a viable water supply, and the fact that the watershed in Massachusetts continues to experience development pressure seems irrelevant to non-RI officials.

Draft revisions to the MADEP regulations were recently available for public comment. Office of Water Resources submitted comments requesting that MADEP formally recognize these waters as public water supply sources. USEPA agrees to work toward recognizing these waters as public water supplies (Class A).