State of the Department
December 14, 2006
Major Accomplishments/Milestone/Challenge

Attainment of the Federal Ozone Standard

For the first time since the Department started monitoring for ozone in the 1970s the entire state of Maine has monitored attainment of the Ozone National Ambient Air Quality Standard (O_3 NAAQS). As a result, EPA will soon sign MEDEP's redesignation requests for the Mid-Coast and Portland 8-hour Ozone Nonattainment areas and Maine will no longer have a designated ozone nonattainment area.

During the 2006 Ozone season there were

- 0 Unhealthy Air Quality Index (AQI) days due to ozone,
- 2 Unhealthy for Sensitive Groups (USG) AQI days, and
- 29 Moderate or higher AQI days.

Both of the USG AQI days due to ozone occurred only at the Summit of Cadillac Mountain monitoring site and they occurred primarily due to long range transport.

In comparison, during our worst ozone season of 1988 there were

- 6 Very Unhealthy AQI days due to ozone – **none in 2006**
- 20 Unhealthy Air Quality Index (AQI) or higher days – **v. 0 '06**
- 34 Unhealthy for Sensitive Groups (USG) or higher AQI days, - v. **2 in 2006**
- 56 Moderate or higher AQI days – **v. 29 in 2008**

DEP's efforts over four decades – in this case working with other States and the Ozone Transport Commission -- makes a difference!

Removal of Cobbosseecontee Lake from Impair Waters List

2006 marked the first removal of a Maine Lake from EPA's list of State Impaired Waters. This represents four decades of work by DEP, the Cobbossee Water Control District, Lake Associations, and Land owners on non-point source pollution reduction projects. Culminating in attainment of water quality standards – not pristine conditions but real bona fide progress unmatched in many states.

E-waste

Over the past year, Maine's "first in the nation" electronic waste law was implemented by the Department. The law establishes a shared responsibility approach among manufacturers, consolidators, municipalities and the State, and requires manufacturers to pay costs associated with consolidation, transportation and recycling of discarded CRTs (computer monitors and televisions).
Implementation of the law has been complex and demanding in a number of respects. Several staff members have worked diligently and creatively to ensure the program's success:

Carole Cifrino – designed and managed program implementation and serves as the program coordinator.
Enid Mitnik – has been the primary contact for work with manufacturers and retailers of CRTs to ensure they understand and comply with the law.

Sue Alderson – developed and manages the databases necessary to manage the data related to manufacturers, brands, consolidators and municipal contacts for the program. She has been the primary person providing technical support to consolidators.

Multi-sector stormwater program

We are close to having over 700 facilities enrolled in this program during its first full year of operation, where field inspectors are conducting between 20 and 40 visits a month, with staff assisting in the creation of anywhere from 2 to 31 stormwater plans for new applicants each month.

Implementation of Stormwater Control Program/Revisions of Rules

Having worked for years with stakeholders to develop a regulatory approach and rules that are effective in reducing stormwater pollutants to Maine's waters, the DEP has implemented this program through continued hard work, coordination and listening to municipal, business and environmental partners.

Old Town Mill Closure, Environmental Review and Sale

Staff from the Bangor and Augusta Offices worked on tight timeframes to fully assess environmental site conditions at the GP Mill in Old Town after it closed. An initial team evaluated the mill during the closing process to ensure that the treatment plant continued to operate properly and that waste chemicals were removed from the site. The assessment team hired a contractor and

worked with them during the assessment process to ensure that the Phase I and II Site Assessments were complete so a sale of the property would be successful.

Staff receiving Commissioner's awards: Paula Clark, Cyndi Darling, David Burns, Steve Farrar, Amanda Wade, Nick Hodgkins**,** Karen Knuuti, Marc Cone, Kathy Tarbuck,
Ed Logue.

Land and Water Permitting

Land Permitting continues to issue record numbers of permits, with more than 100 full permits going out the door each month of the summer. Full land permits through Nov. were at 999 and permit by rules were near 2500 for the calendar year. While the pending inventory has crept to almost 400, our average processing times are still under 80 days.

Water licensing continues to meet its permitting objectives with the backlog of expired permits about 5%, plus we issued all the priority permits we told EPA that we would. This of course represents a historic improvement by Gregg Wood and the entire water licensing unit since Maine accepted delegation of the NPDES from EPA in 2001.

Significant Wildlife Habitat

LRR staff have been implementing the newly adopted Significant Wildlife Habitat rules. We have one field season done identifying

significant vernal pool and another to go this spring before the vernal pool rules go into effect in September, 2007.

Implementation of the shorebirds portion of the rules has been mainly out of the EMRO and the Department recognizes the work of John Cullen, Jennifer Cayer, Robin Clukey, Jesse Damon, Maria Lentine-Eggett, and Jim Beyer.

The DEP is developing modifications to the shorebird rules that will allow for more development but still protect the habitat. IF&W, Andy Fisk, Jeff Madore, Mike Mullen, Jim Cassida and others are working hard and directly on these modifications we'll present to the legislature in January.

Beneficial Reuse Rules

The solid waste division developed, proposed and steered a significant set of revisions to the solid waste beneficial reuse rules through the Board and the Legislature and they are working on implementing these rules.

Staff receiving Commissioner's awards: Paula Clark, Randy McMullen, Jim Glasgow, and Cliff Eliason.

Outdoor Wood Boilers

One of the emerging air quality issues facing the Department is the impact of Outdoor Wood Boilers.

About 2000 residents and businesses have turned to the installation of outdoor wood boilers to save on energy costs and the sales of outdoor wood boilers have grown dramatically in the past several years with a corresponding increase in wood smoke emissions that contain particulate matter and toxic substances. The design and operation of outdoor wood boilers can contribute to inefficient combustion resulting in excessive emission of air pollutants which may reduce the gains made in air quality improvement over the past years and which in combination with inappropriate siting and use can jeopardize human health and prevent individuals from the enjoyment of their property.

Outdoor wood boilers are exempt from the U.S. Environmental Protection Agency New Source Performance Standards for wood stoves and the Agency is not proposing to regulate outdoor wood boilers. Outdoor wood boilers can emit more than 20 times the particulate matter levels when compared to EPA certified indoor wood stoves. In addition to the concern of particulate emissions, the Maine Air Toxics Initiative identified OWB as a public health concern from the emissions of air toxics.

New designs and innovative technology , such as OWBs manufactured by Black Bear in Millinocket, can reduce the amount of pollutants which are emitted by outdoor wood boilers and increase the efficiency of energy delivery to allow the continued use of one of Maine's renewable energy resources while limiting wood smoke air pollution.

Currently the Department is working with other northeast states on the development of a model rule. In addition the Department will introduce legislation this session which would require the Board of Environmental Protection to adopt rules to control the sale, installation, siting and use of outdoor wood boilers at residences and places of business, and to implement minimum standards of performance for units sold, purchased and installed in Maine.

Staff: David Wright, Carolyn Wheeler, Lisa Higgins, Peter Carleton, Doug Saball, Rick Marriner, and Louis Fontaine.

Water withdrawal rules

The DEP spent almost tens years developing a scientific method for developing aquatic base flows with USGS and MGS. We've worked with stakeholders to develop rules that the BEP adopted three weeks ago, 7-1.

We recognize the milestone that Board approval of these rules, a decade in the making, represents.

Staff: Dave Courtemanch and Andy Fisk

Maine Air Toxic Initiative

We continued work on the Maine Air Toxics Initiative (MATI). MATI is a facilitated stakeholder process aimed at identification of which air toxics are the most responsible for creating health risks, the source of those pollutants, and creation of cost effective solutions to reduce the risk. This holistic assessment of air toxics risks will enable Maine to

target available resources for maximum risk reduction for our citizens and environment.

Following agreement late in 2005 on a list of 29 air toxics of concern in Maine, the Air Toxics Advisory Committee (ATAC) formed subcommittees to begin phase II of the initiative: refinement of the science behind the Air Toxics Priority List, and exploration of low-cost or no-cost reduction alternatives for stationary, area, and mobile sources of Air Toxics.

The subcommittees have reviewed the air toxics inventories, models, monitoring results, and risk assessments to determine where the best focus is for resources. They have screened strategies to reduce air toxic risks, and are now calculating air toxic reductions from the various strategies, along with the associated costs. The full Air Toxics Advisory Committee will review the subcommittee recommendations and then present them to the Department. Then the Department will use the ATAC's work to develop an Air Toxics Strategy for the State.

The ATAC serves voluntarily, and does not have any staff. The major work of the project has fallen on staff at the DEP. From the Air Bureau, Marc Cone, Lynne Cayting, and David Wright serve as subcommittee chairs. They have been ably assisted by numerous staff:

Staff: James Brooks, Ron Severance, Tammy Gould, Rich Greves, Lisa Higgins, Becky Hodsdon, Doug Saball, Jon Voisine, Mark Roberts, Kathy Tarbuck, Eric Kennedy, Ed Cousins, Lynn Ross, Pete Carlton, Tom Downs, Kevin Ostrowski, Louis Fontaine, Bob Hartley, Denise Cormier, Jeff Crawford, Jeff Emery, Patrick Fournier, Andy Johnson, Rick Marriner, Denise Cormier, Rick Mayo, Cathy Richardson, Boris Golubow, Mike Karagiannes, Paula Ripley, Andrea Lani, Carolyn Wheeler, Melissa Morrill, Scott Wilson, John James, Ann Pistell, Carole Cifrino, Bob Demkowicz, Julie Churchill, Ginger Jordan-Hillier, Malcolm Burson, and Deb Garrett.

Kerramerican Mine Remedial Action Agreement

Under the agreement with a third party, EmSource, assumed Kerramerican‘s responsibilities and obligations for the mine site clean-up.

EmSource will implement the remedial action which includes construction of a 19 acre cover system on the processing plant site and removal of 10,000 yards of mining waste rock from on-site access roads at a cost of $9,000,000 plus the costs for long-term (30 years) O&M/Monitoring. There is also an environmental clean-up insurance policy to ensure the remedial actions are carried out.
Staff: DEP Project manager Tracy Weston-Kelly, Acting DD Hank Aho.
Assistant Attorney General, Denny Harnish, served as counsel.

Investigation and excavation of Presque Isle landfill by the City to prove to themselves that the landfill had failed. That has set the City of Presque off on a course to cap the present landfill and expand upwards or laterally or both. They are working on the next steps.

Defacto elimination of MTBE from our gasoline supply, more then 6 months prior to the legislated ban, when EPA ended the oxygenate requirement for all states. In May we had 0.03 % by volume on average, an order of magnitude less than the 0.5% standard the MTBE ban legislation required.

Work on the **installation of the first Permeable Reaction Barrier (PRB) in Maine** has begun at Maine Electronics. Most PRBs are a simply a wall of iron filings placed underground in the path of a chlorinated solvent plume. When the contaminated groundwater passes through the wall, chemistry happens and the chlorinated solvents disappear. The technical team at Maine electronics (John Beane, Fred Lavallee) did the research to show that although the wall would indeed eliminate the chlorinated solvents, an elevated pH plume emanating from the wall would release Arsenic from the aquifer downgradient. Rockwell will alter the installation to correct this problem. The work done by the team has prevented Rockwell from spending millions of dollars on a solution that would have created other problems.

Augusta Tissue Mill Emergency Removal Action

Bangor and Augusta staff worked to remove, dispose and consolidate hazardous waste and petroleum at the now abandoned Augusta Tissue mill. EPA arrived this fall to continue our efforts.

Solid waste and Technical Services division staff worked with contractors to solve leachate problems at the landfill and plan for closure of the facility. This will remain a concern until we develop and fund closure of the now abandoned landfill.

Above Ground Storage Tank Legislation

Passage of legislation requiring the upgrade of all underground piping associated with above ground gasoline and diesel fuel tanks with leak detection – 18 years since first proposed to the Legislature by the Department. Piping leaks are the number 1 source of serious oil discharges to ground and surface water from AST facilities.

Maine DEP Receives Grant to Develop New Emissions Inventory Software

On October 4, the Department was notified that it had been awarded a **$500,000 grant** from U.S. EPA's Exchange Network Grant Program to develop **a new web-based air emissions inventory reporting system**. The Air Toxics and Emissions Inventory Section intends to speed the collection of point source, criteria, and hazardous air pollutant emission data and greenhouse gas emission information through the use of a web-based reporting tool, integrate the facility information of EFIS, and improve the National Emissions Inventory data flow from Maine by expanded use of the Maine Exchange

Network Node. In the past year, the Department has held informal meetings with stakeholders and seen demonstrations of software solutions currently available. Over the next few months, the Department will further define its needs and develop an RFP, due for release after the beginning of the year. The new web-based system is expected to be on-line for the 2008 inventory due in early 2009.

Clean Water Act SRF Program Audit

EPA was here for the last two days auditing the SRF program. Their findings were A1. Our SRF program meets or exceeds all national guidelines and they were very impressed with the management and documentation of the program.

They also noted that Maine has the most innovative uses for SRF funds (farms, sand salt buildings, logging, potentially OBDs) beyond the traditional wastewater uses. A state audit earlier this year had similar findings.

Staff: Steve McLaughlin, John True, Tim MacMillan, Dave Breau, Karen Hefler, Brandy Piers, Kelly Merrithew, Leslie Rucker

Financial transition

DEP has now transitioned to working with the Natural Resource Service Center with inevitable bumps but ultimately to a workable management structure. DEP staff and NRSC staff worked extraordinarily hard and are still working to perfect this.

We welcome Chris Campbell as our new financial analyst and Chris is working very hard on analysis of problem accounts and projections for the next biennium.

I want to single out our financial management staff for their competent management of our finances.

Staff receiving Commissioner's awards: Terry Arbour, Wendy Waltz, Sherrie Edwards, Mike Karagiannes and Cathy Levesque.

OIT Transition

Like finance, the transition to state centralized OIT has occurred. DEP's AOIT David Maxwell has been central, along with Chris Campbell in ensuring that DEP's concerns and interests are addressed. DEP is the only department with an AOIT and that represents both our current status as an OIT user among natural resources agencies and the importance of maintaining the strong GIS and information processing abilities this department has developed over the last decade.

RGGI

Jim Brooks and air staff (Marc Cone, Jeff Crawford, Andrea Lani, Mike Karagiannes) have been working to make the RGGI rules work for Maine and take the model regional rule and fit in into a regulatory program approach that works for Maine.

Much more to come on this in 2007 but if the hard work had not gone into the foundation, we would not be posed to put forward this program of regional, national and international significant in the next session of the Legislature.

Dry Cleaner General Summary

This year the Division of Remediation started to take a closer look at dry cleaners in the state. Dry cleaners use a chemical called perchloroethylene to clean clothing, a chemical that is considered a hazardous waste. Past practices have resulted in soil and groundwater contamination under dry cleaning facilities. The Uncontrolled Sites Program has dealt with dry cleaner sites in the past, however, this year we were presented with an emergency situation in Sanford where pollution from a former dry cleaner resulted in indoor air concentrations at unsafe levels in neighboring residential units. Perchloroethylene contaminates indoor air when it travels as vapor through soil air space and utility conduits. It then travels into basements of neighboring properties, referred to as "vapor intrusion."

There are approximately 130 locations where dry cleaners formerly operated, and approximately 57 currently operating dry cleaners in the state. Many of these locations are co-located with residential apartments or businesses, and many are located in residential neighborhoods. The Division of Remediation is starting to conduct limited screening site assessments to identify those that may represent a potential public health and/or environmental risk.

Using GIS for Dry Cleaner Investigations

Beginning in 2004, the MDEP Uncontrolled Sites Program started identifying, locating, and mapping all current and former dry cleaner locations within the State. A GPS was used to survey the locations of each dry cleaner, and this information is stored in the department wide GIS and in EGAD. Public water supplies, sand and gravel aquifers, streams, rivers, ponds, and sensitive habitats, as well as aerial photographs can be displayed with the dry cleaner locations in order to determine what environments may be at risk. EGAD allows us to view analytical data and other site related information. These databases aid in researching, planning, and investigating dry cleaners across the state.

That is a list of major accomplishments and milestones for the DEP and the challenges that face the department in the years ahead.