Report to the Joint Standing Committee on Natural Resources

Long-Term Funding Alternatives for the Scrap Tire Abatement Program

Status/Progress Report Concerning the Scrap Tire Abatement Program

January 2000

Maine Department of Environmental Protection &
Maine Department of Economic and Community Development

TABLE OF CONTENTS
SCRAP TIRE MANAGEMENT PROGRAM REPORT

A. INTRODUCTION

This report is prepared in response to Maine Resolve Chapter 48 (1999) that directs the Department of Environmental Protection and the Department of Economic and Community Development "to devise a proposal for long-term funding of the removal of tire dumps" and to report findings to the Joint Standing Committee on Natural Resources by January 14, 2000.

This Resolve further directs that the Commissioners of the Departments:

- Review options for entering into contracts with tire abatement and site remediation contractors,
- Review mechanisms to ensure long-term funding of the clean-up and reclamation activities,
- Review alternative funding issues including additional fees charged to a purchaser of tires and the use or sale of waste tires for fuel, and
- Identify any statutory or regulatory changes necessary to permit the Department of Environmental Protection to enter into tire abatement contracts or to ensure long-term funding of these activities.

This report also presents detailed information on the status of the tire stockpile abatement program in Maine and on regulatory efforts concerning the management of scrap tires.

B. EXECUTIVE SUMMARY

The Department of Environmental Protection undertook a number of initiatives in establishing the tire stockpile abatement program in 1996. Among these was an initial survey of all known tire piles in the state and a risk ranking of those piles. The survey resulted in the identification of:

5 "Class A" sites (greater than 1 million tires)
29 "Class B" sites (between 10,000 and 1 million tires)
284 "Class C" sites (less than 10,000 tires)

The estimated total number of tires in these 318 sites combined is approximately 22.3 million.

Significant progress has been made to date on site cleanups and tire removals. Thus far, a total of 7,082,500 tires have been removed from stockpiles under the program. These tires have been directed to beneficial uses. As of 12/31/99, abatement work was complete at 2 of the 5 Class A sites, was partially completed at a third site, and was ongoing at a fourth. By mid-2001, cleanups will be complete at 4 of the 5 Class A sites and work will still be ongoing at the fifth (and largest). In addition, at least 6 Class B sites will have been completely remediated by that time. See Table 1 of the report for site specific abatement status summary.

Total cost to date for the removal of 7,082,500 tires is $4,833,786. Cost projection estimates for the remediation of all known stockpiles according to risk category are as follows:

• Class A	9.8 million tires remaining	$ 9,800,000
• Class B	1.7 million tires remaining	$ 1,700,000
• Class C	710,000 tires remaining	$ 710,000
	TOTAL	$12,210,000

Cost estimates are based upon an assumed $1 per tire abatement cost.

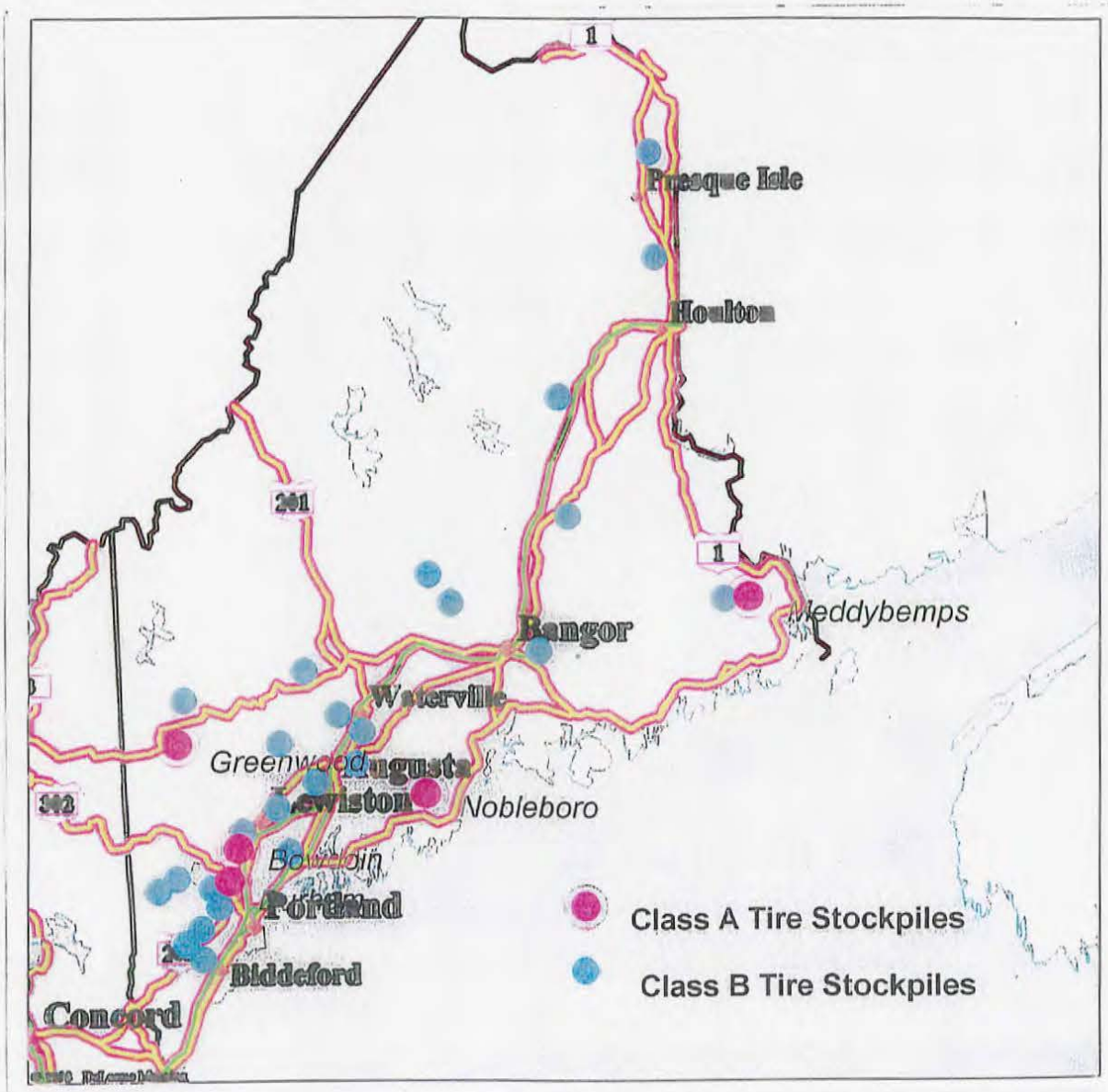
The department recommends funding the tire stockpile abatement program through the use of the following funding mechanisms:

✓ $511,500 from the current surplus of approximately $850,000 in the Solid Management Waste Fund.

✓ Beginning in FY 2002, direct $1.00 per tire fee to tire abatement ($850,000 annually) with a corresponding appropriation from the General Fund to support on-going solid waste management program activities.

- ✓ Remainder of tire abatement funding from bonds and/or direct General Fund appropriations.

Map of Class A & B Tire Stockpiles



LEGEND

- State Capitol
- Town, Small City
- Large City
- Interstate, Turnpike
- US Highway
- State/Prov Boundary
- National Boundary
- Population Center
- Interstate Highway
- US Highway
- Land Mass
- Open Water

Scale 1:2,400,000 (at center)

50 Miles

50 KM

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C. MAINE'S SCRAP TIRE MANAGEMENT AND ABATEMENT PROGRAM: HISTORY AND STATUS

1. Background

In the late 1980's and early 1990's, the Department of Environmental Protection initiated a number of enforcement actions against large tire stockpile owners/operators in Maine. At that time, there was growing concern that the increasing size of these stockpiles and the lack of proper management of them could lead to catastrophic fires with serious environmental consequences affecting both air and water quality. As these cases proceeded, and as the state became aware of other stockpile sites, it became clearer that a solution to the scrap tire management problem must necessarily be multifaceted and comprehensive in nature. It also became apparent that the department needed statutory and regulatory changes on a number of fronts to address this problem.

In 1994, an ad hoc group of tire processors, tire derived fuel users and state agency representatives was convened for the purpose of beginning a dialogue about tire management issues and concerns and possible options for action. That effort resulted in the identification of possible "solutions" in several areas including utilization and markets, regulations and funding.

Building upon the initial work of this group, the Department of Environmental Protection convened an expanded scrap tire management stakeholder group in 1995. The group ultimately issued a series of recommendations that addressed issues concerning funding, enforcement/regulatory matters, and information/education. As a result in part, of the support and participation of a wide variety of interested parties, legislation was passed in 1995 and 1996 that specifically addressed a number of the significant issues that had been identified.

2. Environmental and Public Health Threats from Uncontrolled Tire Stockpiles

Uncontrolled tire stockpiles present their major hazard during and after fire breaks out in the pile. Such fires pose environmental and public health threats by producing many unhealthful products of incomplete combustion and releasing them directly into the atmosphere. Air emissions from open tire fires are more toxic than those of a combustor, regardless of its fuel. Open tire fire emissions include pollutants such as soot, carbon monoxide, sulfur oxides, nitrogen oxides, polynuclear aromatic hydrocarbons, dioxins, furans, hydrogen chloride, benzene, polychlorinated biphenyls, arsenic and mercury. 26 of the 34 most toxic pollutants contained in tire fire emissions are known or suspected carcinogens.

Oxford Tire Recycling, Modesto, CA 1999
5,000,000 tires

1998 Royster Tire Fire, Tracy, CA
7,000,000 tires

These pollutants, and others emitted during a tire fire, can cause significant short term and chronic health hazards to firefighters and residents in the area of a tire fire. Depending on the length and degree of exposure, these health effects could include irritation of the skin, eyes, and mucous membranes, respiratory effects and central nervous system depression.

Based on data from tire fires, approximately 1-5% by weight of the tires burned in large open tire fires is released into the air. That equates to between 10,000 pounds and 50,000 pounds of toxic emissions from a tire fire containing 1 million tires.

An additional hazard posed by fires at large tire stockpiles is the formation of pyrolytic oil during the fire. This oil is formed deep in a large pile of burning tires by incomplete combustion due to the lack of oxygen. The oil seeps into the ground or runs-off from the pile, often in streams of fire-fighting water. Abating the detrimental effects of the oil in the soil and surface and ground waters is one of the most costly and technically difficult aspects of dealing with a tire fire.

Generally, a fire in a large stockpile of whole tires cannot be extinguished by water or foam unless the stockpile has been constructed with fire lanes allowing fire fighters to segregate the fire from tires not yet burning. Burying with soil has been the only certain means to control a large tire fire, however a tire stockpile may continue to smolder for months or years after burial. The costs of fighting fires at large stockpiles and containing the oil and contaminated water run-off are usually in the vicinity of $100,000 per day, taking several days to several weeks to finish depending on resources available. The time and effort spent abating the oil contaminated soil and water is likely to take considerably longer and cost approximately $5,000 per day for 6 months or longer.

3. Maine's 1995 Tire Legislation

In 1995, legislation was passed in Maine that provided important additional tools to the Department of Environmental Protection to assist in the regulation of waste tire management and the actual abatement of public and environmental hazards at uncontrolled tire stockpile sites.

The State program to eliminate tire stockpiles was established at 38 MRSA § 1316-G. It directed the DEP, as available resources allow, to undertake a number of actions. These included but were not limited to the following:

- ✓ To estimate the number of tires that are stockpiled and that pose a significant public or environmental risk;
- ✓ To develop a tire stockpile reduction priority plan based on those risks;
- ✓ To work cooperatively with private and governmental stockpile owners and operators to reduce the size and number of tire stockpiles;

- ✓ To utilize enforcement powers to abate the risks posed by a tire stockpile when voluntary cooperation is not provided by a landowner or operator;

- ✓ To develop site-specific tire stockpile abatement plans;

- ✓ To encourage use of tires; and

- ✓ To contract for services to reduce tire stockpiles and to carry out abatement at the sites.

Public Law c.579 clarified and streamlined the administrative and appeal process by which the Commissioner could designate a site as an uncontrolled tire stockpile and when the Department could act to abate, clean up or mitigate that stockpile's hazards. The law also established specific prohibitions on the unlicensed or uncontrolled storage, processing or stockpiling of tires, and provided clear authority to State, county and local law enforcement officers over the transportation of scrap tires. The law prohibits a person from transferring custody or possession of scrap tires to any transporter not licensed and complying with DEP transporter rules; establishes manifest requirements, and specifies penalties that may be imposed for transport violations.

Private and Special Law, c. 84 authorized a General Fund bond issue that included a $5 million allocation for the clean up of tire stockpiles. This bond passed through referendum in November 1995.

4. Maine Scrap Tire Inventory

During 1996, the department conducted a statewide survey of scrap tire stockpiles and provided public information on the 1995 statutory changes. A letter explaining recent changes to statutes governing scrap tire handling was sent to 3300 addresses that covered the range of businesses in Maine that generate or handle scrap tires. The letter encouraged businesses to contact the department if they had questions concerning the application of the new statutes to their business. The department received just over 100 responses to the letter from tire dealers, tire retreaders, salvage yards, trucking companies, and governmental agencies.

The department conducted a comprehensive scrap tire stockpile survey consisting of an on the ground inspection of all known and suspected tire pile sites in the State containing significant quantities of tires. The department evaluated these sites for numbers of tires in storage and potential environmental and public safety threats. A comprehensive database that contains information generated from the statewide survey was established for setting stockpile clean up and abatement priorities. The following criteria were used in this evaluation and the priority ranking process:

- ✓ Fire hazard presented by each site measured by number of tires, depth and configuration of piles, available resources to fight a fire, and access to piles;

- ✓ Population and property potentially at risk from a tire fire and the pollution released by a fire;

- ✓ Proximity to significant natural and cultural resources;

- ✓ The potential for arson at the site due to lack of site access controls.

In all, 318 sites that each contained at least 1000 tires were identified in Maine. It is estimated that these sites collectively contained roughly 22.5 million tires that may require some degree of remediation.

The sites fell into one of three risk categories. The highest risk category ("Class A") consisted of 5 sites, each having scrap tires and tire rubber scraps exceeding the equivalent of 1,000,000 discarded passenger tires per site. 29 "Class B" sites were identified containing one or more stockpiles of 10,000 to 1,000,000 tires per site; and 284 sites ("Class C") had stockpiles of less than 10,000 tires (averaging about 2500 tires per site).

The 5 Class A sites were estimated to contain more than 90% of the stockpiled tires in Maine and it is on these sites that the department has focused most of its regulatory and clean up effort.

5. Enforcement

Beginning in 1987, the department initiated a number of enforcement actions at tire stockpiles. With the assistance of the Office of the Attorney General, a number of these actions resulted in court ordered facility shutdowns and clean ups. With a single exception however, the owners of the 5 highest priority stockpiles continued acceptance of scrap tires at their stockpiles after being ordered to cease. This resulted in the State prosecuting the owners for violations of outstanding orders.

The enforcement of department regulations and state law pertaining to the stockpiling or disposal of scrap tires began with Maine DEP inspectors seeking to control operations at the stockpiles in Bowdoin and Durham. In 1987, due to the continued non-compliance of the owners of those stockpiles, the department referred the cases to the Office of the Attorney General for resolution of violations. Both cases moved through the courts until 1991 and 1992, when the court granted permanent injunctions against receipt of additional tires at both sites.

The owner of the tire stockpile in Greenwood was also ordered by the court to cease accepting tires and remove the stockpiles. The stockpile remediation in Meddybemps was conducted by the Department under a Board of Environmental Protection Order. The owner of the stockpile in Nobleboro granted the department written permission to conduct remedial activities, making a formal order unnecessary.

The clean up of a number of smaller, medium priority stockpiles, has been accomplished using administrative consent agreements for violations of tire handling regulations where stockpile owners are still available. In these situations, the consent agreement specifies a cash cost share for the departments clean up activities versus a financial penalty. In cases where a municipality has taken control of a stockpile site, the department conducted remedial activities in concert with the municipality. The municipality contributes either financially or with "in kind" contributions necessary to carry out the remediation, such as site or access improvements, access control or grant/remediation contract management.

The effectiveness of the department's enforcement of scrap tire storage and handling regulations improved as a result of the recent changes in statute and regulation described elsewhere in this report. For example, the department obtained a criminal contempt conviction for illegal tire dumping based on information gathered by tire dealers motivated to comply with the new statute. Information on enforcement of the tire transportation law is presented in the section on Scrap Tire Transportation in this report.

6. Scrap Tire Transportation

The solid waste transporter program regulates among other wastes the transportation of scrap tires. The rule (06-096 CMR 411) requires that transport vehicles be licensed and that quarterly manifest records be submitted showing the legal reuse or disposal of scrap tires transported. The current rule is being revised and will include continued regulation of scrap tire transportation. Statute (38 MRSA § 1316-L-2) prohibits a generator of scrap tires or an intermediate used tire storage facility from transferring used tires to a transporter unless that transporter has a Department non-hazardous waste transporter license and a manifest documenting the transport of such used tires.

In 1995, regional workshops held in conjunction with the Office of Attorney General informed and educated the public on the requirements of the non-hazardous waste transporter program. Participants and attendees included law enforcement, municipal officials, state agencies, and transporters.

Although substantial progress has been made in this area, transportation of used tires has been difficult to regulate and monitor. This is due, in part, to the irregular hours generally maintained by tire transporters and the number of possible intermediate storage locations utilized prior to final disposal or reuse. The department, in accordance with statute, has coordinated with law enforcement to investigate and, as needed, prosecute illegal tire transporters. In 1998 the department and the City of Lewiston Police Department worked together to convict a tire transporter of a Class E crime for transporting used tires without a department license and manifest. The department has also coordinated with state and local law enforcement to assist in the monitoring of existing abandoned or inactive tire dumps which could be subject to arson or additional dumping. Continued cooperation between law enforcement and the department will, with the planned and recent changes to tire transportation and

storage rules, make illegal stockpiling of used tires less and less likely to continue.

7. Scrap Tire Abatement/Clean Up

a. Program Goals & Status

As the department worked to establish the scrap tire abatement program in 1996, the following program goals were established:

- ✓ Eliminate high priority fire hazards as resources allow.
- ✓ Maximize actual tire removal from sites.
- ✓ Ensure that all tires removed from sites are beneficially used.
- ✓ Maximize effectiveness of expenditures.

As abatement funds became available, decisions concerning how the funds would be spent were made based on a variety of factors including the site priority rankings, the legal status of the stockpile sites and available markets for reuse. A Request for Proposals was issued for each abatement project planned and all bids were carefully reviewed by a department team prior to the award of a contract. Bidders are required to show that all tires removed from stockpile sites will be beneficially used. Three different contractors have been used for the tire removal portions of the abatement projects contracted to date. Table 1 presents a summary of abatement activity completed or initiated.

Table 1-Tire Stockpile Site Abatement Activity as of 12/31/99

Location of Site	Site Class	# of Tires on site Estimated or Actual	# of Tires Removed to Date	Abatement Status
Bowdoin	A	12 million	2.2 million	Contract on-going until 7/2000. 2nd contract for additional $1.5±million expected to start about same time
Durham	A	2.2 million	1.2 million	Initial phase completed 6/97. Second contract expected to begin 4/2000 and site to be completely abated by 8/2001
Greenwood/ Albany	A	1.5 million	0	Contract expected to begin 4/2000 and site to be completely abated by 8/2001
Meddybemps	A	1.7 million	1.7 million	Completed 7/99
Nobleboro	A	1.7 million	1.4 million	Completed 9/98
Auburn	B	147,870	147,870	Completed 12/99
Augusta	B	250,000	100,000±	Work on-going, expected completion 3/2000
Baldwin	B	66,000	66,000	Completed 9/99
Gorham	B	80,000	80,000	Completed 10/99
Lewiston	B	54,660	54,660	Completed 2/98
Porter	B	133,963	133,963	Completed 10/99

b. Site Activity Summaries - CLASS A Tire Stockpiles

Bothelo Site - Bowdoin, Me. has been identified as the largest tire stockpile in the state, posing the most serious threats to public health, safety and the environment. The department estimates the site to contain at least 12,000,000 discarded tires. These tires were dumped across the site in essentially one enormous stockpile. The primary initial threats presented by the site were considered to be the lack of fire-breaks and access to portions of the pile in case a fire started at the site.

A primary objective in the department's initial removal and abatement activities at the site was to remove tires from the stockpile in a manner that would create firebreaks separating the stockpile into smaller and more manageable stockpiles and to provide better emergency access to all portions of the stockpile site.

The department issued a contract in 1997 initiating abatement at the site. Work under that contract is still continuing. The total amount of the contract, which also included abatement activities at the Nobleboro site was $2.88 million. Work

to date has resulted in the division of the Bowdoin tire stockpile into 12 smaller piles, each separated by fire-breaks a minimum of 75 feet wide. The work that is continuing involves removing tires from high density areas and along portions of the fire-breaks to increase their widths.

The Department's regulatory involvement with the Bothelo site began in the mid 1980's and continues currently. In the 1980's, the department referred enforcement matters relating to the site's owner, Mr. John C. Bothelo to the Office of the Attorney General. That office filed a complaint against Mr. Bothelo and the court granted a preliminary injunction to halt certain activities and practices at the site in 1989. This decision was appealed by the defendant to the State Supreme Court and that court affirmed the trial judge's decision on January 16, 1990. Tire dumping continued at the site and Mr. Bothelo was found guilty of criminal contempt in 1990. A permanent injunction prohibiting further dumping was granted by the Court in 1992. Mr. Bothelo was again found guilty of criminal contempt and was sentenced to 45 days in jail in 1993. The Superior Court granted a supplementary injunction in 1997, which authorized the Department of Environmental Protection to carry out cleanup and abatement activities at the site in order to mitigate the threats it poses.

Portion of Botelho tire dump; Bowdoin, ME

Emerson Site - Durham, Me. The Emerson tire stockpile site in Durham contained approximately 2.2 million tires. Cleanup was began at this site in February of 1997. The tires removed as part of this cleanup were processed to make a lightweight fill that was used by the Maine Turnpike Authority in the construction of the new Portland Jetport Interchange. Under this joint project 1.2 million tires were processed and removed from the site and utilized in construction of the interchange.

Primary initial abatement objectives at the site were to remove tires so as to further separate individual tire stockpiles from each other, and allow better access to all parts of the site in case of fire.

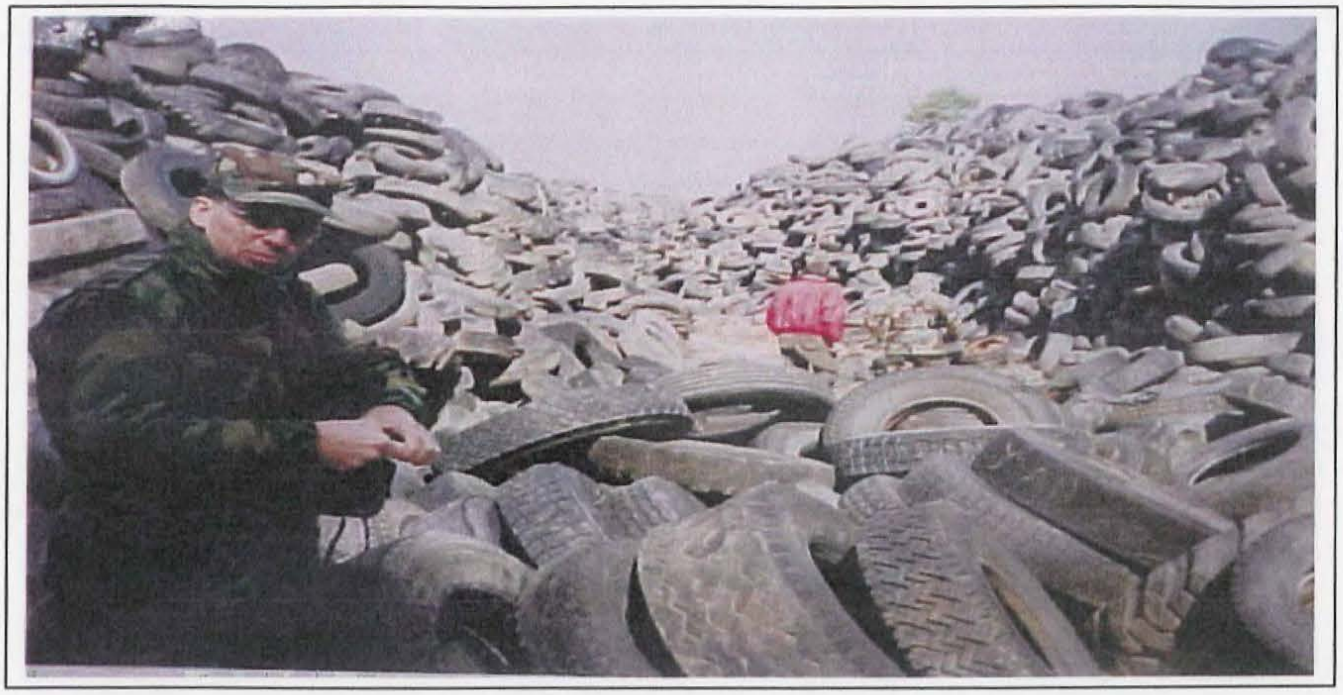
The department will initiate final cleanup of the site by April 2000. In this project, tires from the Emerson site and from sites in Greenwood and Albany Township will be processed into lightweight fill for use by both the Maine Turnpike Authority and Maine DOT in highway construction projects in southern Maine. This project is expected to be completed in the summer/fall of 2001.

The department began dealing with site owner Mr. John Emerson, concerning tire stockpile issues in the mid 1980's. In 1987, the Maine Attorney General's Office filed a complaint for injunctive relief and for civil penalties to stop Mr. Emerson from continuing to accept tires. In that year, Superior Court granted motion for a temporary restraining order. In 1988, the Court found Emerson to be in contempt of that order and authorized the department to erect barriers to the site, to appoint a receiver and to take other actions necessary to obtain compliance with the injunction. This action was appealed by Mr. Emerson to the Law Court and was subsequently denied.

In 1990, Mr. Emerson was found guilty of criminal contempt for continuing to allow disposal of tires on his land. This was followed in 1991 by a permanent injunction and a court order naming the DEP Commissioner as receiver of the site. This order was appealed by Mr. Emerson but was ultimately affirmed by the Maine Supreme Judicial Court.

Pine State Recycling - Nobleboro, Me. This tire stockpile was the first Class A site to be completely remediated. This was accomplished through 5 contracts issued from 1996 through 1998. 14,000 tons of tires and tire rubber were removed, processed and utilized from the site. This equates to the cleanup of 1,400,000 passenger tires from the site.

The site had previously been used as an automobile salvage yard and later as a licensed scrap tire processing facility. This facility received scrap tires and processed those tires into products such as tire derived fuel. The license holder however, had trouble operating and maintaining the facility in compliance with its license. In 1995, the owner ceased operations and abandoned the site, leaving behind significant quantities of whole and partially processed scrap tires.



Preliminary investigation of Pine State Recycling tire dump with Maine National Guard; Nobleboro, ME

East side of Pine State Recycling tire dump
prior to site remediation; Nobleboro, ME

July, 1996 Aerial view of Pine State Recycling tire dump; Nobleboro, ME

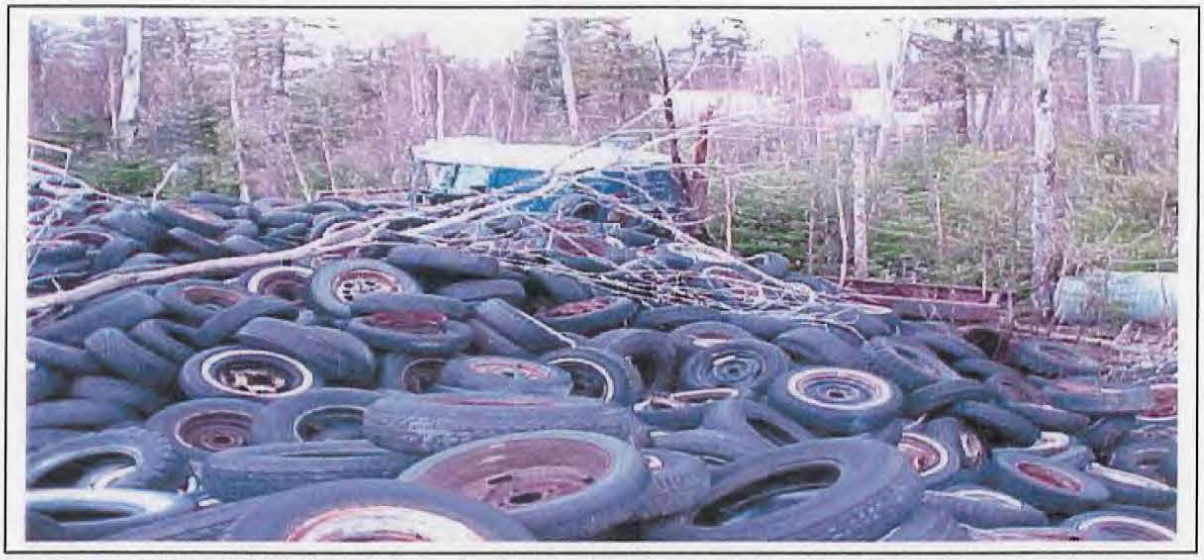
August, 1998 aerial view of the former Pine State Recycling tire dump; Nobleboro, ME

Smith's Junkyard - Meddybemps, Me. The Smith site in Meddybemps, Maine operated as a surplus and scrap salvage operation beginning in 1976. The site covered 11 acres and included 24 uncontrolled tire stockpiles scattered throughout containing an estimated total of 1,700,000 discarded vehicle tires. Of particular concern at this site was the degree to which some of the stockpiles had become part of the wooded area encompassing the site. This presented an even greater fire hazard to surrounding areas.

On April 16, 1997, the department designated this site an "uncontrolled tire stockpile pursuant to 38 MRSA §1316 et seq. This and another DEP order required Harry J. Smith, Jr. to control access to the site, to construct firebreaks and to begin removal of the tires.

On March 10, 1998, Mr. Smith was convicted in Maine District Court of accepting tires at the site in violation of the Department's previous orders. This conviction included penalties of 30 days imprisonment and two years probation. An appeal is pending.

On August 4, 1998, the department contracted for the removal of all tires and tire rubber at the site. Tire cleanup and remediation was completed by the end of July 1999. A total of 16,200 tons of tire rubber were removed from the site at a cost of approximately $1.5 million.



One of 24 tire piles at Smith tire dump approximately 100 yards from an occupied residence; Meddybemps, ME

Tires from this cleanup were processed to make materials that were used in reconstruction of a section of Route 9 and in the construction of a new landfill cells in Caribou and Norridgewock, Maine.

On July 8, 1999, Maine Superior Court ordered Smith to pay a monetary penalty for the tire dumping violations in excess of $780,000.

Gordon Sites - Greenwood and Albany Township, Me. The fifth stockpile site estimated to contain more than 1,000,000 tires is located in Greenwood, Maine on property owned by Peter A. Gordon. This stockpile site, along with another site related to Gordon's operation in nearby Albany Township, is estimated to contain 1,500,000 discarded tires.

The DEP and Mr. Gordon signed an administrative consent agreement and enforcement order on July 23, 1991 which specified a number of steps to be taken to reduce the environmental and safety hazards presented by the sites. Mr. Gordon has not complied with the consent agreement to date. On August 30, 1995, a Superior Court consent decree gave the department authority to abate, cleanup and mitigate the threat or hazard posed by the Gordon facilities. The department and Gordon signed a Memorandum of Understanding last year specifying that Mr. Gordon will not impede the department's unrestricted site access or ability to process and remove tires from the sites.

The DEP has been working closely with the Maine Department of Transportation, the Maine Turnpike Authority and the City of Biddeford to finalize agreements that will allow tire-derived products from these sites and the site in Durham to be stored and utilized for Southern Maine highway projects scheduled by both DOT and MTA for construction in 2000 and 2001.

Remediation contracted in conjunction with these agreements will result in the removal of all tires from the Greenwood, Albany Township and Durham sites by mid 2001.

c. Site Activity Summaries - CLASS B Tire Stockpiles

In 1997 and 1998, the department negotiated agreements with persons responsible for stockpiling tires or municipalities currently controlling the stockpile sites for the clean up of Class B stockpiles. The stockpiles chosen for remediation ranked among the 12 highest in terms of hazard. In aggregate, the 6 piles contained an estimated 600,000 tires.

The department has undertaken clean up of those sites as opportunity and resources permitted. The first of these was a cooperative joint clean up with the City of Lewiston in 1997. The site was a private, collapsed and abandoned building full of tires and was a fire and safety concern to both the City and the department. The department entered into a grant contract with the City allowing both demolition and tire abatement to occur simultaneously at the site through a publicly selected contractor of the City's choice. The demolition activity was paid for by the City while the tire clean up costs, initially paid by Lewiston, received 100% reimbursement by the department. This project appeared to work smoothly for both parties in abating a significant local and state concern.

The second Class B stockpile abatement initiative by the department is a currently active contract to remove a total of 5 tire stockpiles located in Auburn, Augusta, Baldwin, Gorham, and Porter, Maine. As of mid-December 1999, about 550,000 tires have been removed from the sites in Auburn, Porter, Baldwin, and Gorham with the stockpile abatement in Augusta still on going. See Table 1 for more site specific abatement information.

Those Class B stockpiles deemed uncontrolled and eligible for abatement with state funds are:

- ✓ located at sites no longer accepting scrap tires;
- ✓ posing an unacceptable hazard to the neighborhood environment and population;
- ✓ not complying with existing law pertaining to scrap tire handling; and
- ✓ willing to contribute to the clean up effort as negotiated with the department based on their ability to pay and their compliance history.

Responsible parties not meeting the above criteria are liable for all scrap tire removal necessary to bring sites into compliance with existing regulations.

8. Changes In Scrap Tire Handling Regulation

Significant changes in department regulations pertaining to scrap tires were undertaken during the rulemaking process in 1996 through 1998. Chapter 406 of the department's regulations pertaining to scrap tire facilities was repealed and replaced with new sections addressing scrap tire handling in Chapters 402 (Transfer Stations and Waste Storage Facilities) and 409 (Waste Processing Facilities). Changes were made to ensure that stockpiling did not occur for indeterminate lengths of time, and to encourage the beneficial use of the tire rubber into other products.

Chapter 402 now provides for licensing of tire storage facilities and for certain exemptions from licensing for those businesses that must store small quantities of scrap tires in the course of their operations. Additional provisions provide for licenses under permits by rule or reduced procedure licenses in cases where businesses routinely handle larger quantities of scrap tires. All licensed tire storage must be limited to quantities necessary to conduct business. Speculative accumulation of scrap tires in large stockpiles is not permitted.

Chapter 409 provides for licensing scrap tire storage and processing into tire chips or other tire products. Storage quantities are limited in the same way in this Chapter as in Chapter 402.

Chapter 418 (Beneficial Use of Solid Waste) provides for licensing the beneficial use of tires and tire derived products and for exemptions from licensing for certain uses. A permit by rule provision allows the use of tire chips as fill or drainage material in civil engineering projects. Other beneficial uses may be licensed as well under this Chapter.

Chapter 411 provides for licensing the transportation of scrap tires. Proposed changes have been discussed in the section heading Scrap Tire Transportation elsewhere in this report.

9. Tire Recycling Markets

Tires may be processed into small (3/4-1 inch) chips and used as tire derived fuel (TDF). TDF is burned in large solid fuel boilers in three Maine pulp and paper mills. The mills use the TDF generated from all the scrap tires in Maine each year, plus thousands of additional tons. The department has provided tires to this market only when a chipper holding a contract to provide TDF to a mills win a competitive bid. As long as TDF was the only market for tire chips, persons bidding on stockpile clean ups as part of Maine's uncontrolled tire stockpile remediation program would be practically limited to those holding a paper mill contract for TDF. The department undertook the development of additional markets for tire chip use in an effort to reduce potential remediation costs and enhance bidder competition. Market development for civil engineering uses of tire chips has been accomplished through the cooperative efforts of the

Department of Environmental Protection, the Maine Turnpike Authority (MTA), the Maine Department of Transportation (MDOT), and the University of Maine.

Tires may be cut into chips for use as fill in civil engineering projects. The two most common tire chip specifications for civil engineering uses are type "A" chips (maximum size of 3 inches) and type "B" chips (maximum size of 12 inches). Type A chips are mostly used as drainage material while type B chips are mostly used as light weight (low density) fill material useful in minimizing settlement when building on soft soils. The cost incurred in the production of these specification chips for Maine projects has varied between $85 and $127 per ton depending on hauling costs between the stockpile and the construction site(s) and chipping contractor costs of operating in different locations.

Both the MTA and the MDOT have collaborated with the department in the use of tire chips in highway projects. Both agencies report that tire chips are a superior building material, and that their use can result in cost savings when the tire chips replace an inferior and/or more costly material. Both agencies are presently engaged with the department concerning additional projects using tire chips in highway construction. The MDOT in particular has held planning meetings with the department in which initial plans for using tire chips in MDOT projects several years in the future were discussed. Commitments from MDOT are invaluable to the department in allocating its tire stockpile remediation funds by giving the department opportunity to match construction projects with clean up sites. This minimizes hauling distances and additional storage and handling of the chips, which helps to reduce the cost of a stockpile remediation.

Each time tire chips are used as a specification building material, department tire stockpile remediation funds benefit by the approximate chip cost realized by the highway project. In the case of the MTA Jetport Interchange project, the MTA "paid" the department $30 per ton of chips used. This payment helped offset the department's site abatement cost. Since then, the cost of chips has dropped, partly resulting from the department entering the tire chip market. Recognizing that fact, the agreements between the department and MTA or MDOT set a chip value in the new Westbrook Interchange and Route 111 project in Biddeford of $20 per ton of chips used.

In the fall of 1996, the Department and the Maine Turnpike Authority entered into an agreement to share the costs of chipping tires from the Emerson stockpile in Durham into "Type B" tire chips for use as a low density fill materials in the construction of a new interchange on the Maine Turnpike. The total tonnage of chips removed from the site was 10,505 tons or approximately 1.2 million tires. This low density fill material was put into a total of 4 cells (2 "stacked" on each site of the interchange) with each cell of approximately 25,000 square feet and 6 feet deep. Each of the four cells was "wrapped" in a geotextile fabric, equipped with heat and density probes to document conditions of each cell, and separated by 6 feet of inert fill. The use of tire chips as low density fill material reduced the total cost of the project to the Turnpike Authority significantly. Total cost of providing tire chips for the project was $877,000, and the Department's share was $572,000.

Tire chips have also been used successfully as drainage material in landfill construction at the Tri-Community Landfill in Ft. Fairfield and the Crossroads Landfill in Norridgewock. The price generally paid by landfills for the type B tire chips is equivalent to the cost of the natural drainage aggregate it replaced. In the case of Crossroads the price was $8.00 per ton paid to the chipping contractor that arranged the use.

In August of 1998, the Department's tire removal contractor began the processing of tires at the Meddybemps tire dump into tire shreds. 3000 tons (300,000 tires) were used as a sub-base fill material in the DOT Route 9 reconstruction project. 4500 tons (450,000 tires) were used as drainage material at the Tri-community landfill in Fort Fairfield. Another 4000 tons were delivered to the Waste Management landfill in Norridgewock for use as drainage material in its landfill expansion. Final tire removal from Meddybemps was completed by July, 1999.

U.S. Route #9, Wesley, Me. road reconstruction project using type B modified tire chips as sub-base fill material

Use of Type B tire chips as drainage material in Crossroads Landfill
Norridgewock, Me

D. SCRAP TIRE MANAGEMENT PROGRAM FUNDING

1. Revenue Sources to Date

The scrap tire management program and tire stockpile abatement activities have been funded since 1995 through an initial one-time allocation and through a series of General Fund bond issues. Specifically, these have been:

- ✓ An initial allocation in 1995 from the Maine Solid Waste Management Fund[1] of $600,000.

- ✓ General Fund Bond Issues authorized by the Legislature and approved through referenda for:

$5,000,000	in 1996,
$2,000,000	in 1998,
$1,000,000	in 1998, and
$ 500,000	in 1999.

The total funds available to the program to date are $9.1 million.

2. Expenditures and Costs to Date

Table 2 on the following page summarizes the expenditure of all funds available to date. As the Table indicates, all available funds will have been spent or contractually committed before July 2000. To continue abatement activities during FY 2001, the department seeks to allocate $511,500 from the Maine Solid Waste Management Fund[1] to tire abatement and an additional $1,000,000 bond.

[1] The Maine Solid Waste Management Fund was established by the Maine Legislature "as a nonlapsing fund to support programs administered by the State Planning Office and the Department of Environmental Protection." (38 MRSA § 2201 et seq.) (The Fund was initially established in 1989 and supported programs administered by the former Maine Waste Management Agency and DEP). There are 2 primary revenue sources for the fund:

1. "Waste handling fees" – fees assessed on special waste disposed of at commercial, municipal and regional association landfills (38 MRSA § 2203-A); and,

2. "recycling assistance fees" - $1 fee on the retail sale of new tires and new lead acid batteries. (When the fees were initially established by the Legislature in 1989, fees were also assessed on new major appliances, new major furniture items, new bathtubs and new mattresses. The fee on appliance and bathtubs was repealed on 1/1/96. The fee on furniture and mattresses was repealed on 1/1/97.)

Total revenue to the Fund in FT 99 was approximately $2 million. The fund has supported administration of 100% of SPO's solid waste planning and recycling program and roughly 70% of DEP's licensing, compliance, technical assistance and outreach program for solid waste.

Table 2-Site Abatement Expenditures And Status 12/31/99

SITE	$ SPENT	ADDITIONAL COMMITTED *1	ADDITIONAL PLANNED *2	STATUS
Bowdoin	$1,425,562	$933,177	$1,150,000	On-going, completing 1ST phase. New contract by Spring 2000.
Durham *3	$572,394		$2,000,000 *3	Partial Cleanup, 1ST phase completed; site to be completely remediated by mid-2001
Greenwood & Albany Twnshp. *3	$ 0		*3	Cleanup to be initiated by April 2,000 and completed by mid-2001.
Lewiston	$60,126			Completed
Meddybemps	$1,502,945			Completed
Nobleboro	$895,759			Completed
5 CLASS B Sites	$377,000	$175,000		On-going, 4 sites completed
TOTALS	$4,833,786	$1,108,177	$3,150,000	

*1. "Additional Committed" indicates funds that are already dedicated to the site as part of an on-going contract.

*2. "Additional Planned" indicates available funds to be committed through contracts during FY 2000.

*3. The Department estimates that an approximate total of $2,000,000 will be needed to completely cleanup and abate hazards at sites in Durham, Greenwood and Albany Township. The Department is requesting bids to accomplish this at all 3 sites under a single contract. Work is expected to begin by or before April 2000.

On or about the time this report is published, the department will publish its RFP for a three site clean up/abatement proposal that would result in the removal of all tires remaining at the Durham site and all tires at the State's 5th high priority stockpile in Greenwood and Albany Township. The projected cost for this project is $2,000,000. The $1,150,000 remaining in the department's current funds will be used to continue clean up and abatement activities at the Bowdoin site. A new contract for this site is expected to be finalized and work underway by June 2000.

3. Projected Costs

The cost to complete all clean up and abatement activity at the Bowdoin site is extremely difficult to accurately predict. After all currently funded and planned work at the site is accomplished, the department believes that an additional $9.8 million may be needed to finish abatement at the site.

Estimating actual numbers of tires or tonnage at stockpile sites can be very difficult as a result of topographic variation and past management practices at the sites. The department continues to revise estimates when new information becomes available and as new field survey work is completed. Estimates in this report are based upon the best information currently available.

As has been true in other states, contract prices, when converted to a common unit price, have varied significantly from contract to contract. The unit price of previous and on-going contracts have ranged from a low of approximately $45/ton of tires removed to $110/ton of tires removed. These roughly equate to $0.45/tire to $1.10/tire. Bid prices have ranged up to $327/ton.

Variations in contract costs are due to a number of factors. Among these are distance from stockpile site to processing site(s) and final markets; conditions of road and access to the sites; physical difficulties presented by the site; degree of contamination of the tires on the site; and number of tires at a site. The factor of site size may become an increasingly important issue as the largest sites are progressively cleaned up. In a 1999 report to the California Legislature, the California Integrated Waste Management Board indicated that their median cost for site clean ups was $1.27/tire but that they expected clean up costs for tire piles in the 5,000 tire size range could commonly range up to $3.25/tire.

Based upon the Department's current experience, DEP estimates that the cost to clean up all remaining Class B tire stockpiles would total approximately $1,700,000. The total cost of cleaning up all remaining Class C sites is approximately $700,000. Projected costs are based upon an assumed $1 per tire abatement cost.

E. DISCUSSION AND RECOMMENDATIONS

1. Contracting

The Department of Environmental Protection has been comfortable working within the State's normal bidding and contracting procedures for accomplishing tire stockpile abatements. This process has allowed for an established and accepted way of judging bidders based upon each bidder's experience, resources and bid price. Generally in other state tire programs, the established bidding and contract process is modified or abandoned if there are no (or insufficient) markets within which bidders can make arrangements in order to be able to submit a reasonable and competitive bid price.

Maine's tire stockpile abatement program was at the outset, already in the unusually fortunate position of having a large and stable market for the tire derived fuel that could be produced from the tires to be abated at the uncontrolled tire stockpiles.

This market situation is further strengthened by the increasing use of processed tires as light-weight fill. These chips, when properly produced and installed, provide a suitable substitute for expanded shale; a material that is produced in northern New York and is available to Maine construction sites at considerable expense. The production and substitution of Maine Type B tire chips from tire abatement activities has resulted in an additional use and market that few other states have. The DEP has been able to work with both Maine DOT and Maine Turnpike Authority, the primary users of this material, through normal means of interagency cooperation without the need to alter the State's existing contract procedures.

2. Funding

Possible funding mechanisms for the tire abatement program have been discussed among stakeholders, state agencies and the legislature at various points over the past 4-5 years. Consistently, there has been broad consensus that the tire stockpile abatement program should be funded, but most of the possible funding options put forward during these discussions (including increased fees on tires at the point of retail sale, fees on new vehicle tires, fees on vehicle title transfers and fees on vehicle registrations) were not broadly supported. The use of bond issues has historically received the most widespread support, and in fact has allowed the program to successfully move forward.

A solid waste stakeholder group convened in 1997 by the Department of Environmental Protection and the State Planning Office examined a number of solid waste program and funding issues. The group developed recommendations in 1998 that were presented to the Joint Standing Committee on Natural Resources. Among the recommendations was a solid waste program funding piece which specifically endorsed dedicating the majority of the existing $1 "recycling assistance fee" on new tire purchases ($850,000 annually) to tire stockpile abatement. The group supported the use of General Fund monies to compensate for the loss of state program funding from the Solid Waste Management Fund if the fee was dedicated.

The scrap tire abatement program has very successfully and substantially reduced the risks associated with uncontrolled tire stockpiles. By mid 2001, 4 of the 5 largest stockpiles (Class A) in the state will have been completely remediated. Substantial progress will have been made and will be ongoing at the fifth site (Bowdoin). Additionally, at least 6 Class B sites will have been completed. This significant progress in achieving the department's tire stockpile abatement goals is an important factor in determining an appropriate funding approach for the remainder of the program. Given the rate of progress and the

maturity of the program, seeking to establish new fees or radically different approaches to funding does not appear to be necessary or prudent.

3. Recommendations

Based upon review and evaluation of the performance, scope and current status of tire stockpile abatement program, the following RECOMMENDATIONS are made:

(1) The state should continue to assess the $1 "recycling assistance fee" on new tires at the point of retail sale. Beginning in FY 2002, the revenue from this fee (projected to be approximately $850,000 annually) should be dedicated to tire stockpile abatement activities. A corresponding General Fund appropriation must also be made for the purpose of supporting solid waste management programs at the Department of Environmental Protection and the State Planning Office, currently supported in part through the recycling assistance fee.

(2) The state should continue to support bond issue requests from or provide direct General Fund appropriations to the Department of Environmental Protection for tire stockpile abatement, as may be needed to supplement the recycling assistance fee revenue.

(3) $511,500 from the current surplus of approximately $850,000 in the Maine Solid Waste Management Fund should be allocated for tire stockpile abatement.

(4) The Department of Environmental Protection, with the guidance and concurrence of the Joint Standing Committee on Natural Resources, should make a specific determination regarding the appropriate point of conclusion of the state's role in stockpile abatement.

(5) The Department of Environmental Protection should continue to actively pursue cooperative and innovative arrangements with end users of tires to reduce abatement project costs and foster appropriate beneficial uses.

(6) Maine's regular, established bidding and contracting procedures should continue to be employed for tire stockpile abatement contracts.

APPENDIX A

Description of Tire Programs in Other States

APPENDIX A

Description of Tire Programs in Other States

Nationally, 36 states rely on some designated fund other than the General Fund to address one or more aspects of waste tire management within the state. In all except 1 of these states funds are tied at least in part to a fee or tax on the sale of tires and/or vehicles or the registration of vehicles. The one remaining tire program is funded by general solid waste tonnage fees that support a broad range of solid waste management endeavors. In addition, one other state (Connecticut) has a tire fee where the revenue from that fee is remitted to the General Fund rather than to fund any specific waste tire management activities. As in Maine, some other states have tire fees that can be used to fund or partially fund other solid waste programs. In some states, like Pennsylvania, there is no formal tire program but there is a tire fee which contributes to other solid waste program funding.

While the overall funding mechanism for tire programs are remarkably similar, significant variation occurs in the fee and tax rates, what is charged a fee, where in the State's economic framework that fee is collected and what waste tire management activities are supported. Of the 38 states that have tire and/or vehicle fees:

(1) fees ranged from $0.25/tire to $3.50/tire depending upon state program and tire type,

(2) 27 states had fees of $1/tire or more,

(3) most states charged the fee at the point of retail sale for new tires,

(4) 2 states only charged a fee when used tires were left with the retailer,

(5) 7 states only charged a fee at the point of vehicle sale, vehicle title transfer, or vehicle registration. and

(6) some states only charged a fee or taxed a tire at the wholesale level.

Tire Stockpile Abatement Activities in Other States

More than half of the states that have tire programs do not have formal stockpile cleanup or abatement programs. In addition to Maine, 14 other states fund or are able to provide funds for tire site abatement activities. The abatement activities and mechanisms for funding these activities are summarized below.

Arkansas. Annual generation: 2.4 million scrap tires per year.

A $1.50/tire retail sales tax is collected on tires sold within the state and a $1/tire fee is placed on all tires imported into *Arkansas for disposal.*

These monies are placed in the Waste Tire Management Fund to provide grants for tire cleanup, recycling, and the establishment of waste tire collection centers. Ten percent of the total designated funds are set aside for grants to solid waste management districts for the removal of tires from illegal disposal sites.

California. Annual generation: 29 million scrap tires per year.

A $0.25/tire disposal fee is collected on all used tires left with a dealer or other retailer.

This fee originally generates about $5 million per year and has been primarily used to implement recycling grants and market development loans. California has had significant problems with fires at waste tire sites and in closing those sites. The amount of the fee, what materials should be charged a fee and how the fee should be collected and used have been subject to ongoing legislative debate and will be covered later in much more detail.

Colorado. Annual generation: not estimated.

A $1/tire recycling development fee is collected on passenger and truck tires sold in the state when waste tires are left with the retailer for disposal.

This money is placed in the Waste Tire Recycling Development Fund to finance waste diversion projects, fund research and experimental activities and conduct feasibility studies. State law was later amended to add the cleanup of illegally dumped tires to the state's scrap tire program and to provide future funding of local cleanup programs.

Florida. Annual generation: 19 million scrap tires.

A $1/tire tax on the retail sales of tires. (This fee is also levied on new car tires)

Approximate annual fee income: $16.5 to $18.2 million/yr.

Florida has had a very aggressive and successful abatement program which in the 7 years preceding 1996 had resulted in 24 waste tire sites containing approximately 8.7 million tires being cleaned up through state-contracted, county-contracted and private abatements. As of 1996, sites containing 6.9 million tires still remained to be abated.

Abatement activities have been sporadic from year to year, primarily because of budget constraints. In fiscal year 95-95, the Florida DEP did not contract any abatements due to zero budgeting. Budget allocations in FY 96-97 allowed the Department to proceed with new program contracts.

Florida's program has a local component in which the Department may contract with counties to abate sites of up to 100,000 tires each. Under these, a county may propose elements of a site abatement that they want to do, enter into a contract with the Department and get paid for performing that work. Other elements are contracted by the Department through the private sector.
(Source Florida DEP Solid Waste Management Report)

Georgia. Annual generation: 6 million scrap tires.

A $1/tire management fee on new tire sales.

Monies generated by the fee are used for grants or loans to cities and counties for pile abatement and enforcement or for innovative technology development.

Kentucky. Annual generation: 3.8 million scrap tires.

A $1/tire tax on the retail sales of tires.

Monies from the tax go into a waste tire trust fund established for cleanup of tire piles, fund grant and loan programs, develop waste tire material uses, and fund collection and storage programs. In 1996, an estimated 10 million scrap tires were stockpiled in 79 known abandoned tire piles across the state.

Legislation was expected to be proposed to change the point of fee collection to vehicle registrations; to establish an abatement plan for the stockpiles; and to tighten tire collection and storage regulations.

Maine. Annual generation: 850,000 tires.

A $1/tire fee on the retail sales of new tires.

Maryland. Annual generation: 5 million scrap tires.

A $1/tire fee on the first sale of all new tires in Maryland by a tire dealer, including new tires sold as part of a vehicle.

The fees are deposited in the Used Tire Cleanup and Recycling Fund and are used to pay for the cost of scrap tire abatement, to assist tire recycling projects and education programs and to pay administrative costs.

As of 1996, money from the fund had been used to initiate the cleanup of 2 scrap tire stockpiles resulting in the removal of 457,000 tires. An addition 1 million tires had been removed from more than a dozen other stockpiles through administrative/enforcement efforts and approximately 3.1 million scrap tires remained in illegal stockpiles.

Michigan. Annual generation: 7.5 - 9.2 million scrap tires.

A $0.50/tire disposal surcharge collected on vehicle titles.

Monies from the surcharge may be used to fund scrap tire pile cleanups on public lands and for enforcement.

Minnesota. Annual generation: 4.5 million scrap tires.

A $4/vehicle tax on vehicle title transfers.

Minnesota's scrap tire law was passed in 1984. Of the $4 million in fees collected each year, approximately $2.6 million per year funded stockpile cleanup programs and tire recycling, reuse or processing grants. Since 1984, Minnesota cleaned up 100% of the waste tires from 292 tire dumps identified at the start of the program. In all, 14 million tires from 316 tire dumps have been removed. No tire stockpile cleanup activity was expected to be necessary after January 1, 1996.

Missouri. Annual generation: 5 million scrap tires.

A $0.50/tire tax on retail sales of new tires.

Funds can be used for tire dump site cleanups and for grants to end-users. Monies awarded to cleanup projects totaled $900,00 in 1995.

New Jersey. Annual generation: 9.7 million scrap tires.

No fee or tax.

From 1985 to 1995, the New Jersey DEP completed cleanup of 3 major tire stockpiles. As of 1996, New Jersey estimated 8 other major stockpiles containing approximately 5.5 million scrap tires had been identified and remained to be cleaned up. However, much uncertainty still exists and NJDEP has established milestones of identify all sites containing 20,000 or more tires by the year 2000 and identifying the universe of facilities managing any quantity of scrap tires by the year 2005.
(Source: NJDEP table of slid/hazardous waste program goals)

Ohio. Annual generation: 12 million scrap tires.

A $0.50/tire fee on the first (wholesale) sale of new tires. Established 1996, funding is scheduled to sunset in 2000.

Ohio EPA has estimated that more than 100 million scrap tire have been deposited across the state. It is the agency's intention to channel approximately $10 million total ($2 million per year) to illegal tire stockpile cleanup activities before the fund sunsets in 2000. The first 2 contracts for state funded cleanup were bid in 1997 and targeted two sites containing an estimated collective total of 5 million tires.

Rhode Island. Annual generation: not stated.

A $0.50/tire tax on the wholesale sale of tires and
An additional $0.75/tire tax on new tires.

A $5.00/tire deposit system on each new vehicle tire purchased with a full refund to the consumer upon return of the used tire.

Revenues from the $0.50 tax on wholesale sales are deposited in the "Hard-to-Dispose Materials Account" along with monies from surcharges on other materials. These revenues generate $3 million per year. Revenues from the $0.75/tire tax are deposited in a tire site remediation account established by the Rhode Island Port Authority. 90% of these monies are to be used to remediate contaminated industrial facilities (brownfields) and existing tire piles. The remaining 10% of the fund is to be used to assist municipalities with the collection and proper disposal of waste tires.

Cleanup of the largest tire dump in the state began in 1994 and is expected to be completed by the year 2005. The site is estimated to have 9 million scrap tires.

Texas. Annual generation: 17 million scrap tires.

A $2/tire fee for new motorcycle tires and automobile tires with rims less than 17.5" in diameter.

A $3.50/tire fee for new truck, off-road vehicle and large automobile tire.

A $1/tire fee on the sale of used tires with rims between 12" - 17.5".

Revenues from these taxes were used for a broad range of user and processor reimbursement projects, for grants and for tire site cleanup planning and implementation. These rebate programs resulted in large stockpiles of crumb rubber for which there are no immediate end uses. (*Source: California June 30,99 Final Tire Report)*

The waste tire recycling fees and many of the activities and incentives under the waste tire recycling program expired December 31, 1997.

Virginia. Annual generation: not stated.

A $0.50/tire fee on the retail sales of new tires established 1989.

Monies from the tire fee are placed in a Waste Tire Trust Fund. A statewide survey showed that there were 731 tire piles which contained an estimated 17.8 million scrap tires with a projected clean-up cost of $35 million. There are a number of regional collection and processing programs and active pile cleanup projects continuing in Virginia. As of 1996, 4 millions tires had been removed through landfill pile and private pile cleanups, 31 "Amnesty Events", and collection centers. There is also an end user reimbursement program that provides income to scrap tire users.

West Virginia. Annual generation: 1 million scrap tires.

No fee.

An estimated 4.6 million scrap tires are stockpiled at various sites Two sites contain most of these tires. The state funds stockpile clean-up work when it can (2 sites in 1994).

Wisconsin. Annual generation: 5 million scrap tires.

A $2/tire fee on new vehicle titles generates approximately $3 million annually. Established in 1987.

Wisconsin's fee system has been in place since 1987 and as of January 1995 had funded 80 waste tire stockpile cleanups involving more than two-thirds of all tires stockpiled in the state and costing $11 million. Responsible parties also cleaned up an additional 200 stockpiles.

APPENDIX B

Summary of State Waste Tire Program Funding

APPENDIX B

SUMMARY OF STATE WASTE TIRE PROGRAM FUNDING
1995

STATE	FUNDING SOURCES
ALABAMA	None.
ALASKA	None.
ARIZONA	2 % fee on sale price of new tires, not to exceed $2, also a $1/tire fee applies to new car sales.
ARKANSAS	A $1.50 per tire retail sales tax, also a $1 fee on all imported tires.
CALIFORNIA	$0.25 per tire disposal fee on used tires left with retailers.
COLORADO	$1 fee on all auto & truck tires sold when waste tires are left with retailer for disposal.
CONNECTICUT	$2 tax on all new, used and retread tires sold in state. Monies are remitted to the General Fund.
DELAWARE	None.
FLORIDA	$1/tire tax on retail sales of tires. This fee also applies to new car sales.
GEORGIA	$1/tire management fee on new tire sales.
HAWAII	None.
IDAHO	$1/tire fee on retail sale of new tires.
ILLINOIS	$1/tire fee on sale of new tires.
INDIANA	$0.25/tire fee on sale of new tires, also a $500 registration fee for outdoor tire storage sites.
IOWA	General solid waste tonnage fees for broad solid waste management endeavors, including waste tires.
KANSAS	$0.50/tire excise tax on retail sale of new tires.

KENTUCKY	$1/tire tax on retail sale of tires.
LOUISIANA	$2/tire fee on retail tire sales.
MAINE	$1/tire fee on retail tire sales.
MARYLAND	$2/tire fee on the first sale of all new tires, including tires sold with new vehicles.
MASSACHUSETTS	None.
MICHIGAN	A $0.50/tire surcharge on vehicle titles.
MINNESOTA	A $4 tax on vehicle title transfers. Scheduled to sunset 97.
MISSISSIPPI	$1/tire fee on retail tire sales.
MISSOURI	$0.50/tire tax on retail sales of new tires.
MONTANA	None.
NEBRASKA	$1/tire fee on retail sales of new tires.
NEVADA	$1/tire surcharge on new tires sold at retail.
NEW HAMPSHIRE	None.
NEW JERSEY	None.
NEW MEXICO	$1/vehicle add-on registration fee.
NEW YORK	None.
NORTH CAROLINA	2% sales tax on new tire sales.
NORTH DAKOTA	$2/vehicle new vehicle sale fee to cover clean-up of abandoned vehicles and can apply to tire piles.
OHIO	$0.50/tire fee on the first (i.e. wholesale) sale of new tires.
OKLAHOMA	$1/tire surcharge on new tire sales. This fee increases to $3.50/tire for tires with rims of 17.5" or greater.

OREGON	None. $1/tire fee sunset in June 1993.
PENNSYLVANIA	$1/tire fee used to fund broad solid waste programs.
RHODE ISLAND	$0.50/tire tax on wholesale tire sales. Additional $0.75/tire tax on new tire sales(retail).
SOUTH CAROLINA	$2/tire fee on sale of new tires.
SOUTH DAKOTA	$0.25/tire vehicle registration fee not to exceed $1/vehicle.
TENNESSEE	$1/tire fee on the retail sales of new tires.
TEXAS	$2/passenger tire with rims up to 17.5". $2/ motorcycle tire. $3.50/tire for truck tires, off-road tires and auto tires with rim diameter 17.5" or more. $1/tire on sale of used tires with rims from 12" to 17.5".
UTAH	$1/tire fee on sales of tires up to 24.5" rims diameter.
VERMONT	None.
VIRGINIA	$0.50/tire fee on the retail sale of new tires.
WASHINGTON	$250/year license fee on tire haulers.
WEST VIRGINIA	None.
WISCONSIN	$2/tire fee on new vehicle titles.
WYOMING	None.

APPROVED
MAY 26 '99
BY GOVERNOR

CHAPTER
48
RESOLVES

STATE OF MAINE

IN THE YEAR OF OUR LORD
NINETEEN HUNDRED AND NINETY-NINE

S.P. 539 - L.D. 1601

Resolve, to Direct the Department of Environmental Protection and the Department of Economic and Community Development to Devise a Proposal for Long-term Funding of the Removal of Tire Dumps

Whereas, uncontrolled tire stockpiles in the State pose a significant public health and safety risk as well as a significant threat to the environment; and

Whereas, the risks associated with uncontrolled tire stockpiles in the State demand a comprehensive plan to abate those stockpiles and reduce the risk to the public and the environment; and

Whereas, the State is presently limited in its ability to contract with companies that conduct tire removal and site remediation activities; and

Whereas, the limitations on entering contracts with tire abatement and site remediation contractors have interfered with tire abatement and remediation projects; and

Whereas, it is in the best interest of the State to develop a plan that will encourage and enable private contractors to undertake tire abatement and remediation projects; now, therefore, be it

Sec. 1. Long-term funding plan for the removal of tire dumps. Resolved: That the Commissioner of Environmental Protection and the Commissioner of Economic and Community Development shall review options for entering into contracts with tire abatement and site remediation contractors, including mechanisms to ensure long-term funding of the clean-up and reclamation activities in connection with

their review of funding issues. The commissioners shall review alternative funding issues including additional fees charged to a purchaser of tires and the use or sale of waste tires for fuel. The commissioners shall report the findings of this investigation and recommendations to support the cleanup and funding to the Joint Standing Committee on Natural Resources by January 14, 2000. The commissioners' report must also identify any statutory or regulatory changes necessary to permit the Department of Environmental Protection to enter into contracts with tire abatement and site remediation contractors and mechanisms to ensure long-term funding of the clean-up and reclamation activities. The Joint Standing Committee on Natural Resources may report out legislation based upon the report to the Second Regular Session of the 119th Legislature.