

**REPORT TO THE VIRGINIA GENERAL ASSEMBLY
ON WASTE TIRE PILE CLEANUPS IN VIRGINIA – 2005**

EXECUTIVE SUMMARY

Introduction

Chapter 101 of the 2003 Acts of the Assembly included a provision that increased the Virginia tire recycling fee from \$0.50 to \$1.00 for a 3 year period, with all additional revenue dedicated for the removal and recycling of tires from waste tire piles. It also required the Virginia Department of Environmental Quality (DEQ) to submit a report by December 1 of each year to the Chairman of the Senate Committee on Agriculture, Conservation and Natural Resources and the Chairman of the House Committee on Agriculture, Chesapeake and Natural Resources on the use of these funds and the progress in cleaning up tire piles. This report is submitted to fulfill this requirement.

2005 Activities

During 2005, DEQ completed two major cleanups begun in 2004 as discussed in the 2004 Report to the Virginia General Assembly. These included the most challenging cleanup project ever undertaken by DEQ, the Lee Farm pile on the banks of the Mattaponi River in Caroline County and the cleanup of the defunct Tire Recyclers, Inc. facility in Charles City County. Photographs of both sites have been included in the Appendix.

In late 2004, DEQ began “Clean Sweep”, a state-wide, multi-contractor effort to rid Virginia of the remaining 280 piles by 2006. However, the project was suspended in November, 2005 due to a looming cash flow deficit. It was later determined that all funds to be available from the 2003 tire recycling fee increase were insufficient to complete the entire scope of the Clean Sweep effort, due mainly to increased costs and larger than expected amount of tires in many piles. 136 piles remain to be cleaned up.

The 2005 performance is as follows:

		<u>Tires Removed</u>	<u>Cost</u>
Lee Farm-	Caroline Co.	605,500	\$1,278,500
TRI-	Charles City Co.	1,003,800	\$ 552,090
Clean Sweep-	(prior to suspension)	<u>2,539,900</u>	<u>\$7,066,121</u>
Total		4,149,200	\$8,896,711

2003-2005 Results

The 2003 Report to the General Assembly documented DEQ's 10-year history of tire pile cleanups. The 2003 fee increase gave DEQ more resources to take more aggressive actions. First, in 2003, End User Reimbursement payments for cleanup of tire piles were doubled to \$100 per ton (\$1 per tire) and a plan to cleanup the 5 largest remaining piles ("Big 5 Plan") was initiated. In 2004, the Big 5 Plan was completed which cleaned up the 5 largest tire piles in Virginia and \$100 reimbursements continued. The 2005 activities and results are reported above.

Together, these activities and projects have had the following results:

		<u>Tires Removed</u>	<u>Cost</u>
2003	\$100 per ton & Big 5	1,657,000	\$1,349,525
2004	\$100 reimbursements	369,000	\$ 369,128
2005	Lee Farm, TRI & Clean Sweep	<u>4,149,200</u>	<u>\$8,896,711</u>
	Total	6,175,200	\$10,615,364

Financial Management

The 2003 fee increase was designed to provide \$7,800,000 over its 3-year life to clean up an estimated 4,500,000 tires. In actuality, DEQ has cleaned up 6,175,200 tires and expended \$10,615,364, the balance paid from deposits to the Waste Tire Trust Fund prior to 2003.

Of 339 piles in Virginia in 2003, 136 now remain to be cleaned up. Based on a DEQ analysis using the Clean Sweep experience to-date, the remaining 136 piles contain an estimated 2,500,000- 3,000,000 tires. At an estimated cost of \$2 per tire, complete cleanup would cost an estimated \$6,000,000.

WASTE TIRE PILE CLEANUPS IN VIRGINIA-2005

I. Introduction

This represents the third in a series of annual reports to the General Assembly on the progress made by DEQ in cleaning up waste tire piles, using increased fees provided by the 2003 General Assembly. This report provides details on 2005 activities, briefly reviews the work of past years, summarizes all work accomplished and projects the work left to be achieved in future years.

II. 2005 Activities

During 2005, DEQ completed two major cleanups begun in 2004 as discussed in the 2004 Report to the Virginia General Assembly. These included DEQ's most challenging cleanup project ever undertaken, the Lee Farm pile on the banks of the Mattaponi River in Caroline County and the cleanup of the defunct Tire Recyclers, Inc. facility in Charles City County.

A. Lee Farm, DEQ pile #033-010, Caroline County

Estimated to contain 365,000 tires, this pile was located in a deep (70'), steep (60% slopes), long (700') ravine that emptied directly into the Mattaponi River. Photographs of this clean-up project are included in the Appendix. Before cleanup began, numerous actions were taken to protect the river:

- 1) a Hazard Prevention and Fire Plan was developed for use by state and local emergency response personnel
- 2) DEQ positioned absorbent booms and deployment equipment just down river, for faster response time in case of a fire; a training and deployment event was conducted
- 3) a "dry hydrant" was installed nearby

Due to the terrain, two contractors were needed. REMAC America of Potomac, Maryland was hired to remove and relocate the tires to an adjacent field while Tri-Rinse, Inc. of St. Louis was the on-site tire shredder. Removal and shredding work progressed well. On October 18, 2004, DEQ held an on-site press conference to review the progress and to announce "Clean Sweep, the agency's plan for cleaning up the remaining tire piles" (See II.C.).

By mid-November 2004, REMAC had finished all planned work when heavy weekend rains caused mudslides, which toppled an excavator, exposed thousands more tires and sent mud "slurry" towards the river. There were no injuries as no one was working over the weekend. On November 22, DEQ declared an Environmental Emergency and issued an emergency contract to stabilize the entire ravine area. A "check dam" was enlarged to trap the slurry, which was pumped up to the field to avoid runoff into the Mattaponi River. Within 6 weeks, the entire area was stabilized, the final

tires removed and the Environmental Emergency was declared “contained.” A month later, the last tire was shredded and removed.

The project is not complete, however. DEQ continues to monitor the site, as portions of the bank still erode and some sediment reaches the river. After a period of natural stabilization, DEQ will provide permanent stabilization and run-off control, during the 2006-2007 time frame, unless problems accelerate.

The cost for removal and emergency work was \$673,000 and coupled with shredding of the 605,500 tires removed (66 % over estimate), the total project cost was \$1,278,500, or \$2.11 per tire.

B. Tire Recyclers, Inc., DEQ pile #036-053, Charles City County

Tire Recycler, Inc. (TRI), a large-scale waste tire processor serving the Richmond area, closed its doors in March, 2004, due to equipment and financial problems. A photograph of the site prior to clean-up is included in the Appendix. The company did not respond to Compliance and Enforcement measures to clean up its growing pile, estimated at 750,000 tires. After TRI violated two Consent Orders and in response to concerns of emergency officials, DEQ used a new legislative tool (§10.1-1418.4 of the Code of Virginia) to clean up the site. The Code allows DEQ to enter the property, clean up the site and file a lien on the property to eventually recover cleanup costs, if not paid in full by the owner.

Emanuel Tire of Virginia won the competitive bid for the cleanup. Though there were no major site problems at this facility, the number of tires ultimately shredded and recycled reached 1,003,800, exceeding the original estimate by 34%. The eight-month project cost \$552,090.

Per the provisions of §10.1-1418.4, DEQ filed a \$552,090 property lien in Charles City County District Court. The lien has been attached to the property’s deed, but the debt can be collected only if the property is sold. An October 2005 Trustee Sale was abruptly halted so it is unclear when DEQ will receive the payment. However, a major environmental problem has been rectified.

C. “Clean Sweep”- A State-wide Cleanup of 280 Remaining Tire Piles

In late 2004, DEQ began Clean Sweep, a state-wide, multi-contractor effort to rid Virginia of the 280 remaining tire piles by mid-2006. In November 2004, DEQ began a series of 5 competitive bids to accomplish Clean Sweep. The process continued through August, 2005 and the following contractors were selected:

-Richmond/Central Virginia areas-

Part A (processing)- Tri-Rinse, Inc.

Part B (removals only)- REMAC America, Inc.

-Northern Virginia areas-	REMAC America
-Tidewater areas-	Tri-Rinse, Inc.
-Valley/South-Central areas- (included 2 removals)	Emanuel Tire of Va.
-Western/Southwestern areas-	U.S. Tire Recyclers

Work was proceeding well under all 5 contracts, in spite of a high number of piles with challenging conditions. A photograph of a site after tires were removed is shown in the Appendix. However, by October 2005, it became clear that there would be insufficient funds in the Waste Tire Trust Fund (see Section III) to complete these contracts. Accordingly, on November 1, 2005, all work was suspended; contractors were notified to complete work on piles where activities had started, but not to begin the cleanup of additional piles.

Two major problems caused this situation:

- 1) Most piles had many more tires than estimated. The average overage was 156%, with one topping 1,200%. Up to this point, most estimates were fairly reliable as piles were in open terrain, accessible and easy to define. The Clean Sweep piles, unfortunately, were generally located in adverse pile situations (ravines, pits, etc.), contained obscured and partially buried tires, and contained many tires on “rims” (the metal wheels), which slows processing and increased costs. Nine piles in the Richmond area were in such severe terrain (like Lee Farm, but smaller) that they were first subject to a separate removal contractor. Two such piles were similarly handled in the Valley bid process.
- 2) The bid prices escalated significantly, due to large increases in operating costs in mid-2005 (fuel, etc.). In addition, the large geographic areas in the Valley and Southwest area bids further increased prices due to substantial travel distances for work activities

In November 2004, 280 tire piles existed. To date, 144 have been cleaned up and 136 have not been addressed. The 136 property owners will be notified that their piles will not be cleaned up at this time due to a lack of funds.

D. Summary of 2005 Results

Though Clean Sweep had to be halted in November 2005 due to lack of funds, significant work was completed in 2005 through to the activities described above:

	<u>Tires Removed</u>	<u>Cost</u>
-Lee Farm, Caroline County	605,500	\$1,278,500
-TRI, Inc. Charles City County	1,003,800	\$ 552,090
-Clean Sweep- (thru November) +	<u>2,539,900</u>	+ <u>\$7,066,121</u>
TOTAL:	4,149,200	\$8,896,711

E. 2003-2005 Results

The 2003 Report to the General Assembly documented DEQ's 10-year history of tire pile cleanups. The 2003 fee increase gave DEQ more resources to take more aggressive actions. First, in 2003, End User Reimbursement payments for cleanup of tire piles were doubled to \$100 per ton (\$1 per tire) and a plan to cleanup the 5 largest remaining piles ("Big 5 Plan") was initiated. In 2004, the Big 5 Plan was completed and \$100 reimbursements continued. The 2005 activities and results are reported above.

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III. **Financial Management**

It should be noted that all additional funds from the increased fee have gone only to direct contract costs. All other DEQ costs of competitive bidding, financial and contract administration, field verification of work and all on-going compliance and enforcement activities have been funded from other Waste Tire Trust Funds.

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Of 339 piles in Virginia in 2003, 136 now remain to be cleaned up. Based on a DEQ analysis using the Clean Sweep experience-to-date, the remaining 136 piles contain an estimated 2,500,000- 3,000,000 tires. At an estimated cost of \$2 per tire, complete cleanup would cost an estimated \$6,000,000.

The increased tire fee is set to expire on June 30, 2006, when it will revert to the original \$0.50 per tire. At that funding level, only modest annual cleanup funding (\$200,000-\$500,000) will be available each year. This is because the majority of the \$0.50 revenue supports End User Reimbursements for the 7,000,000 “current flow” tires generated each year.

APPENDIX

Tire Pile Cleanup Photographs



Lee Farm, Caroline County, Partial View of the Ravine with Tires



Lee Farm, after Tire Removal: Stabilization Still Needed



Tire Recyclers, Inc Facility in Charles City County; Before Cleanup



Clean Sweep; Holgaard Pile, Patrick County
(small exposed plot of tires yielded 290,000 tires on 1 acre)