

December 9, 1993
ILR 93-U

Senator Craig A. Peterson
Representative Neal B. Hendrickson
Representative David Ure
Utah State Capitol Bldg
Salt Lake City UT 84114

Subject: Status of Utah's Waste Tire Recycling Program

Dear Legislators,

We have completed a follow-up of our Waste Tire Recycling audit (Report # 93-03) released last February. In addition to our normal follow-up procedures, we also addressed the waste tire program issues raised by Rep. Neal Hendrickson. He asked that we determine the current status of the program and its ability to address Utah's waste tire problems. Rep. Hendrickson's primary concerns were with the ability of the new program to actually reduce the number of waste tires within the state and the growth of Utah's Tire Recycling Fund. Both concerns have some merit as heavy competition, in addition to underdeveloped end use, has limited the number of tires actually recycled and Utah's Tire Recycling Fund has continued to grow to a level now over \$5,300,000.

In spite of these setbacks waste tires are being recycled under this program with over 500,000 tires being burned in the last four months. Most interested parties believe that the current reimbursement amount is sufficient for Utah's needs and only time is needed to complete the program. The following will discuss the findings of our review in the areas of program success, competition, out-of-state tires, fund use and growth, and future prospects.

Tires Are being Recycled

To date, over 500,000 tires (5,400 tons) have been burned since the \$65 per ton reimbursement program began in July 1993. The majority of this consumption (4,000 tons) has been as tire derived fuel (TDF) by the Holnam-Devil's Slide cement plant which has maintained continuous operation of TDF burning this year averaging around 30 tons per day.

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Ash Grove cement, has opted to burn whole tires and also burns around 30 tons per day. However, Ash Grove ceased its tire burning operations after only two-and-a-half months and 1,400 tons of tires due to quality problems. They plan to begin tire burning again January 1994.

There has been a great deal of speculation as to whether or not the two cement plants will continue to burn waste tires. It is the most important issue facing the program to date because if either stops utilizing tires, Utah's program to eliminate tire landfilling will fail. Both plants have invested in capital equipment to utilize tires and both believe that waste tires can supply at least 15 percent of their energy needs. Both also realize their unique position of being the only end users and refuse to pay for the tires. In essence, with full utilization (30 tons per day) each would receive energy they value at \$225,000 per year. Economically it makes sense for both plants to fully utilize Utah's waste tire resource.

Our conversations with both plants found that each desired to use some waste tire burn energy to supplement their coal/natural gas burning kilns. Holnam has been using TDF continuously while Ash Grove has had problems. Ash Grove's decision to not burn tires until January is a function of the current demand for cement. Cement demand is so high right now that Ash Grove would lose business if it were to limit its production while experimenting with its coal/natural gas/waste tire burn mixture. When product demand decreases Ash Grove will again burn tires. If everything works out as planned, between the two cement plants, waste tires will be consumed at a rate greater than 1.8 million per year.

Waste tire consumption near the 1.8 million figure is necessary because the most valid estimates we could find show Utah generating in excess of 2 million waste tires per year. A share of these tires are recycled in tire recapping operations (recappers estimate 15 to 20 percent) sending as many as 1.6 to 1.7 million tires each year to landfills or, preferably, to burn operations. Consumption of 1.8 million waste tires each year in burn operations benefits the state because it eliminates tires from going to landfills and addresses those tires already in landfills. During the brief period both cement plants were burning tires, demand exceeded the supply of newly generated waste tires so, to the benefit of the state, existing tire piles were being cleaned up.

Competition Has Limited the Program

Competitors within Utah's waste tire recycling arena continue to struggle for majority shares of transportation, processing, and end use of tires. The continued competition has not prevented waste tires from being recycled either as burned whole tires or as tire derived fuel (TDF) but negatively effects the program by creating artificial, speculative costs. This competition is found throughout the waste tire industry with each involved party in tire transportation, waste tire processing, and waste tire consumption vying to get a majority share.

The greatest harm has come from the competitors cutting profitability to gain control. In one case, a possible TDF supplier discussed a contract with one cement plant to provide TDF at no cost if the state subsidy was \$50 per ton. Any state subsidy over \$50 would be divided equally. Since the state subsidy was increased to \$65 per ton, the cement plant had a bargaining tool that forced any other possible Utah TDF processor to provide fuel at no cost. This no cost arrangement was in spite of the fact that the plant had been paying \$16 per ton for Idaho

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generated TDF. Transporters have paid and have charged retailers to take used tires from them, depending on the status of their competitors.

Out-of-State Tires Are Coming into Utah

Another recent problem is the introduction of tires from Idaho. Idaho law has banned landfilling of tires in any form much as Utah's law will do in 1994. A number of tires have been transported from Idaho to Utah to be shredded and placed in landfill. The tires have come from a number of dealers and, in one instance, from an Idaho county landfill operation. These waste tire generators are paying \$90 per ton to have the tires transported and disposed of in Utah.

We could not identify any instance where a Utah shredder received Utah reimbursement money for Idaho tires. All the Idaho tires have apparently gone to a Utah shredder who does not recycle tires, he shreds for landfill purposes only. The problem is not the reimbursement but that out-of-state tires are being landfilled in Utah while we are attempting to eliminate landfilling.

Utah's Tire Recycling Fund Continues to Grow

A continuing concern is the build up of the state's \$1 per tire recycling fund. The major use of the fund is the 65 cent per tire reimbursement paid to the end-users. Another five cents per tire is earmarked for county health programs and the state's Division of Solid and Hazardous Waste. This means that 30 cents of each dollar collected is retained in the fund along with prior collections. The fund now contains over \$5,300,000 and has no directed use. Fund growth has been slowed because only 30 cents is retained while in prior years over 75 cents per tire was retained. Many in the industry fear the fund will be used for non-tire related purposes without specific legislative wording directing its use specifically at waste tire pile cleanup.

It is very likely that the fund at its current level of \$5,300,000 is sufficient to cleanup Utah's existing waste tire piles. However, deriving a total cost figure for tire pile cleanups is difficult because there is a lack of information on the number of tires needing cleanup and the condition of those tires. There has never been a statewide count of waste tires nor is it known how involved each pile cleanup will be. Industry estimates of existing tires in waste piles range from 1 to 2 million tires. Cleanup of tire piles in other states has been estimated to cost between \$1.50 to \$2.00 per tire. From this we can roughly estimate that it may cost between \$1.5 and 4 million to fully cleanup Utah's existing tire piles. It is also being suggested that some of this money be used to get rural waste tires to Wasatch Front tire recyclers. Costs for transporting rural waste tires range from 35 to 75 cents per tire, two to four times more than transportation in urban areas. We estimate this additional transportation cost could mean an annual drain on the fund between \$120,000 and \$250,000

Conclusion

The current statute appears to be effective but has been hindered by heavy competition. Waste tires are being addressed in limited quantities while industry competition sorts itself out. However, while this problem with competition should be self correcting, Utah's efforts are

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hampered by the limited number of end users. This problem may also sort itself out if new users are developed.

It may be necessary to allow Utah's waste tires and their supporting subsidy to be used out-of-state if in-state uses cannot handle current waste tire generation. Altering the existing statute to assist in the cleanup of existing tire piles and transportation from rural communities may also be of benefit. We do not believe that placing the reimbursement in the hands of transporters would be helpful as it complicates control of the end use.

If you have any questions regarding the above information please feel free to contact our office.

Sincerely,

Wayne L. Welsh
Auditor General

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