

**REFUNDS TO SERVICE STATIONS FOR GASOLINE LOSSES**

**REPORT OF THE  
VIRGINIA ADVISORY LEGISLATIVE COUNCIL  
TO  
THE GOVERNOR  
AND  
THE GENERAL ASSEMBLY OF VIRGINIA**



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COMMONWEALTH OF VIRGINIA  
*Department of Purchases and Supply*  
Richmond  
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A REPORT OF THE  
VIRGINIA ADVISORY LEGISLATIVE COUNCIL

RICHMOND, VIRGINIA, August 19, 1961

To:

HONORABLE J. LINDSAY ALMOND, JR., *Governor of Virginia*

and

THE GENERAL ASSEMBLY OF VIRGINIA

At the 1960 Session of the General Assembly bills were offered to increase the tax on motor fuels and to compensate service station owners for losses in handling motor fuels due to evaporation and shrinkage. After extended discussion, the gasoline tax increase was adopted; the General Assembly was of opinion that more information should be obtained concerning the equity of such an allowance to service station operators. A resolution was adopted directing the Virginia Advisory Legislative Council to make a study and report to the 1962 Session upon the advisability of providing such an allowance to service station operators. The text of the resolution follows:

SENATE JOINT RESOLUTION NO. 57

*Directing the Virginia Advisory Legislative Council to study the desirability of an allowance to dealers in motor vehicle fuels for shrinkage, evaporation and otherwise.*

Whereas, the General Assembly has had before it for consideration at this session an increase in the taxes levied by the Commonwealth of Virginia on motor vehicle fuel; and

Whereas, an increase in the tax on motor vehicle fuels may result in an increase in the losses experienced by dealers in motor vehicle fuels through shrinkage, evaporation and otherwise; now, therefore, be it

Resolved by the Senate, the House of Delegates concurring, that the Virginia Advisory Legislative Council is directed to study the desirability of granting dealers in motor vehicle fuels an allowance to cover their losses through shrinkage, evaporation and otherwise. The Council shall consider how such losses might best be apportioned and what would constitute a proper allowance to dealers on the part of the Commonwealth. All agencies of the State shall assist the Council in its study. The Council shall conclude its study and make its report to the Governor and General Assembly not later than October 1, 1961.

At the meeting of the Council following the 1960 Session, the Council requested Charles K. Hutchens, member of the House of Delegates, Newport News, to serve as Chairman of a Committee of the Council to make the initial investigation and report. The Council selected the following to serve with Mr. Hutchens upon this Committee: Claiborne D. Gregory, former member of the House of Delegates, Hanover; Lyman C. Harrell, Jr., member of the House of Delegates, Emporia; Chester H. Lamb, Com-

missioner, Division of Motor Vehicles, Richmond; Julian H. Rutherford, Jr., member of the House of Delegates, Roanoke; Richard C. Shadyac, Arlington; and Landon R. Wyatt, member of the Senate of Virginia, Danville.

The Committee organized by electing Senator Wyatt as Vice-Chairman. John B. Boatwright, Jr., and F. W. Harkrader, Jr., were appointed Secretary and Recording Secretary, respectively, to the Committee.

The Committee obtained a great deal of information on the subject of allowances to various handlers of motor fuels for losses in handling. It studied the bills which had been offered at the 1960 and earlier sessions to provide an allowance to service station operators and the amendment to the 1960 bill which would have required those seeking a refund to pay a fee of \$5 in order to be eligible therefor.

A public hearing was set and the service station trade associations were notified of the time and place thereof by stories in the daily newspapers. Shortly before the hearing was scheduled the Committee was notified that these associations and their officials had prior engagements which prevented their attendance upon the meeting. The Committee held a hearing, the publicity therefor having been distributed throughout the State, and heard from the members of the public present. No one requested an allowance as such but one individual, representing a transit company, urged that if an allowance were made to service stations that a like allowance be made to the transit companies. The Association of Highway Users appeared at the hearing and subsequently filed a statement to the effect that in view of the demands upon the funds available for the construction and maintenance of highways they would not advocate an allowance for shrinkage and like losses. In order to afford the service station representatives the amplest opportunity to present their case, a second hearing was set and publicity given thereto.

At the second hearing the Virginia Gasoline Reilers Association, Incorporated, and the Metropolitan Retail Gasoline Dealers Association, which are hereinafter referred to as the Associations, appeared and made statements urging the allowance of a refund to service station operators. They were accompanied by a large number of operators of service stations many of whom appeared before the Committee and urged allowance of the refund. Statements were filed seeking to prove the contentions of the Associations.

The Committee considered the practices of other states, the present refund practices in Virginia for shrinkage, evaporation and handling, the marketing structure of the petroleum industry, the fiscal requirements of the highway systems of the State and local governments, and the equities of the situation. All of this material and the arguments of those who desire such an allowance were maturely considered.

At the conclusion of its study, the Committee reported to the Council. The Council has reviewed the report of the Committee, and makes the following recommendation:

#### RECOMMENDATION

No allowances to service station operators for shrinkage and evaporation should be made.

We will now set forth the background material pertaining to the instant study, together with the reasons which impelled us to arrive at our recommendation.

## BACKGROUND

In the following discussion the refiner and the importers will be treated as one. Normally, refined gasoline is brought into Virginia by ship, barge, pipeline, railroad tank car, or motor vehicle transport. The one exception to this is the refinery located near Yorktown to which crude oil is brought which is subsequently refined into gasoline. The incidence of the tax is at the point of the first sale, transfer of title or use. There are only three service stations which receive gasoline in railroad tank car lots; in the latest year, they received a refund of \$788.86; this refund is made under the provisions of § 58-717 which allows a refund of 1% of the tax on motor fuel received in tank car lots to cover shrinkage and evaporation.

When gasoline is brought into the State it is not taxable upon importation. This gasoline is stored by the importer at his terminal. He may transfer same to his service stations and the tax applies at the point of sale to the consumer with no refund to the importer for shrinkage, etc., or he may transfer the gasoline to a limited dealer who pays the tax direct to the State. The limited dealer will take the gasoline which he has purchased from the importer and transfer it into his own bulk storage; from this point the dealer will deliver to service stations and to others. This dealer who purchases from the importer and transfers to his own bulk storage plant is allowed a refund of 1% of the tax paid on the motor fuel which refund is intended to cover losses for shrinkage, evaporation and handling. In the latest year for which information is available such dealers were allowed a refund of \$16,105. Jobbers and other dealers who received gasoline and stored the same in bulk storage were allowed a refund in the latest year of \$62,796. It is seen from the foregoing that, with the exception of the three service stations referred to, no allowance is made to service stations for shrinkage, evaporation and loss in handling.

§ 58-717 of the Code provides refunds to dealers, duly licensed under the Motor Fuel Tax Act, equivalent to 1% of the tax on motor fuel received by tank car, barge, pipeline delivery or by transport truck to a bulk storage tank from another duly licensed dealer who has paid or assumed the payment of the tax. These refunds are provided in consideration of shrinkage and evaporation and are paid also on deliveries by tank car to service stations. Each dealer receiving such refund is required to furnish bond, in a minimum amount of \$1,000.00. The tax loss caused by these refunds during the years 1957-59 was as follows:

Calendar 1957	\$ 91,402.01
Calendar 1958	79,150.32
Calendar 1959	78,901.84
Total	<hr/> \$249,454.17

§ 58-717 provides also that only one refund can be made on the transfer of the same motor fuel.

Estimates were obtained from the Division of Motor Vehicles that if either House Bill No. 469 of the 1958 Session or House Bill No. 376 in the 1960 Session had been enacted into law the gross revenue from motor fuel taxes for the calendar year 1961 could have been reduced by \$800,135.42, or roughly 1% of approximately \$80 million, that being approximately the amount of tax collected on gasoline sold through service stations.

In all of the foregoing it must be remembered that the refund for non-highway use is not taken into account. This discussion is limited

solely to losses of and refunds to persons who handle gasoline on which the tax has been paid with the single exception of the three service stations referred to which receive in tank car lots.

### ARGUMENTS OF THE ASSOCIATIONS

1. The Associations contend that service station dealers are forced to act as tax collectors for the State; that they receive no wages for this tax collection, and are not compensated for losses sustained by shrinkage and evaporation. The short reply is that the service station dealers are not tax collectors at all. They merely buy and sell a product on which a tax has been paid just as a dealer in cosmetics or jewelry does. It also might be brought out that these dealers receive no compensation from the federal government for their duties in withholding taxes and social security payments from the wages of their employees. The extent of the losses which may be sustained by shrinkage and evaporation will be subsequently discussed.

2. The Associations contend that during World War II the Office of Price Administration allowed service station dealers a variation of up to 2% on ration coupons to cover shortages created by the shrinkage and evaporation of fuel. This was done because service stations frequently lost ration stamps; if they did not have something in the way of an allowance to cover their loss of stamps—not loss of fuel—some of them might have had to go out of business.

3. The Associations contended that gasoline expands and contracts according to the temperatures above and below ground. It is well known that gasoline expands with heat and contracts when cold. The petroleum industry prices gasoline based on a temperature of 60 degrees Fahrenheit and many government contracts calling for the purchase of gasoline contain a clause providing for adjustments in deliveries on this basis. The Associations contend that at 60 degrees, when 1,000 gallons of gasoline is loaded at the bulk plant, the service station will receive that amount if the outside temperature remains the same. When the gasoline is delivered into his underground tanks, which are at approximately 60 degrees, the gasoline changes not at all in bulk. However, if the outside temperature is at 80 degrees when the tank truck is loaded at the terminal, and delivered to the service station, the service station operator will be billed for 1,000 gallons which, after it is delivered into his underground tanks, will shrink approximately 3 gallons for each 5 degrees of temperature and he will be able to pump out less gas than he has paid for. It is the accepted practice that no temperature adjustment is made for the delivery of gas at the service station. Also, on delivery of a trailer load of gasoline the service station is billed for and pays at the gallonage metered by the vendor.

The Associations pointed out that 13 states allow service station dealers a refund for shrinkage, evaporation and handling of gasoline including the collection of gasoline tax. They seek the same allowance for their members. They also point out the allowance which is made to the bulk dealers for losses in handling and storage. They state that 39 states allow deductions for evaporation losses and for other reasons but that, in the majority of these states, the deduction is allowed to the wholesale distributors or the bulk plant operator as is true in Virginia. They contended that there is no allowance to service station operators for shrinkage or evaporation except in the case of service stations which are company operated.

Information was obtained from the major oil companies showing the allowances made their stations for shrinkage, etc. The allowance ranges from  $\frac{1}{2}$  of 1% to actual losses; data from some of the companies showed that the losses ranged as low as .0037 of 1%. Concerning the physical volume of the loss at the service station the detailed information follows:

Sun Oil Company, several years ago, made a survey of stock losses in 110 of their service stations located in eleven states and in Canada and found the losses amounted to .1546%. Atlantic Refining Company reported a loss of 166 gallons or .0183% in 12 service stations with a total throughout of 908,006 gallons during a twelve month period. Esso Standard reported the operation of two service stations during the year 1959 at which 871,485 gallons were pumped out with a sustained loss of 32 gallons or .0037%. With no gallonage figures reported, Tidewater Oil Company reported a survey of stock losses in company operated service stations which indicated an average gain of .0001%.

Material was also offered by the Associations, obtained from a federal agency, showing the total number of gallons of fuel loss through shrinkage, evaporation and handling in Virginia. However, much of this loss is already compensated for since an allowance for handling is made to certain dealers as above noted.

The Associations made no serious issue of the loss due to evaporation and this report will not therefore consider that matter except to point out that it is inconsequential according to evidence presented.

In response to questions as to the administrative cost of their proposal, the Associations stated that the \$5 filing fee which a service station operator would have to pay, under the bill, in order to apply for a refund was intended to cover the administrative cost to a large degree. They also offered to act as agents in collecting and transmitting applications for refunds to the Division of Motor Vehicles, the administrative agency charged with the collection of the gas tax and the administration of refunds. They had no information concerning the administrative cost of their proposal but appeared to be of opinion that its cost would not be substantial since the small operators would not apply for the refund.

We are sympathetic to the position of the service stations. They are independent business men, many of them on a small scale, and in most cases do not have the economic strength to bargain with their suppliers. In addition, they supply credit to many of their customers which poses a possibility of losses from bad debts. The average turnover in the operation of service stations is approximately 24% a year. However, it is common knowledge that new service stations are being constructed all the time and that there appear to be an ample number of people who are ready and willing to operate them.

As to the administrative cost of the proposal made by the Associations, according to the information which we have been able to obtain from Georgia, which has a service station refund plan substantially similar to that proposed by the Associations, the administrative cost would amount to approximately \$72,000 a year as a minimum for investigators alone in Virginia with the likelihood that strict enforcement would run the cost materially higher than that. Each investigator, of whom approximately 8 would be required, would require an outlay of approximately \$4500 a year in salary and the same amount for traveling expenses. This would be direct outlay and would not cover the expenses of processing claims in the office. (This may seem a large number of investigators but there are a great many service stations in the State and the turnover on the part of the operators is, as has been said, approximately 24%.)

The Associations, in an attempt to reduce the administrative costs, offered to collect and forward the applications for refunds to the Division. This could well complicate rather than help the situation; for instance, an application could be received with incorrect information on it and the Division would have no way of knowing whether the service station or the Associations supplied the incorrect information. If the claims were assigned to the Associations for collection, a major benefit of the refund would go to the Associations. Investigating and prosecuting false and fraudulent claims would be prohibitive in cost. Because of the difficulty of determining who made a false entry on an application the Division would almost inevitably have to honor every application for a refund.

It is worthwhile asking how much value a refund would be to the service stations. In order to obtain information on this subject, the Division of Motor Vehicles was requested to make a survey and report on that subject. An excerpt from that report follows:

“When the number of company owned and operated service stations and small retailers is eliminated, the situation involving the number of applicants for refund, the total gallons on which refund could be claimed and the dollar value of such refund computed at ½ of 1% is as follows:

Number of applicants	7,592
Number of gallons	761,636,046
Dollar value of refunds	\$266,572.60

“To this should be added the number included in the 27 nonreplies to our questionnaire plus the unknown number of service stations and the gallonage delivered to them by persons hauling their own gasoline tax-paid. Judging from the above, it is apparent that the estimate \* \* \* that 80% of the gasoline sold in Virginia is dispensed through service stations and other retail pumps is reasonably correct.

“It has been stated that 81% of the gasoline sold through service stations is sold by 19% of the service stations. If this is true, 19% of the 7592 eligible applicants or 1442 of the service stations would have handled 616,925,197 gallons during the calendar year 1959 and the other 81% of the service stations would have handled 144,710,849 gallons. Based upon these figures the average annual refund of ½ of 1% to the 1442 service stations would amount to \$149.73 while the average refund to the other 6150 stations would amount to \$8.23. These figures are based entirely upon the replies to our questionnaire.”

In view of the above we do not believe that the refund, even at 1%, would be sufficient to be of any material value to the average service station operator. The cost to the highway fund and the State of processing and investigating each claim could well be more than the average refund and in the aggregate would far outweigh the value to the average service station operators. We cannot believe that the amount of the refunds to an individual station would be the difference between profit and loss.

In addition, it must be remembered that the entire cost of the refunds and administration would come from motor fuel tax funds which in the opinion of many persons are insufficient to pay for all the roads which we need. Virginia has been fortunate in that diversions from the gas tax are not allowed and that the cost of administration has been low. To adopt the claim of the Associations would be to reduce the revenues from the tax both by reason of the refund and the increased administrative cost, a reduction the highway revenues cannot afford.

## TEMPERATURE DIFFERENTIALS

The Associations centered their argument upon the temperature differential and those service station operators who spoke at the hearing likewise made reference to this point. One service station operator in the Norfolk area, who has a very large operation, pointed out his losses due to the fact that the gasoline was delivered to him at a higher temperature than that of his underground storage tanks and that he consequently suffered a loss in shrinkage. His loss was said to be \$350.00.

This matter of the so-called shrinkage is not a new one in the petroleum industry. Studies in Texas, California and Wisconsin, considered as a whole, indicate that on a year-round basis instead of a loss in gallonage due to shrinkage there is in fact a gain in gallonage. This is because, if gasoline is delivered to a service station when the outside temperature is 30° when the gasoline is put into the ground, it expands, as the ground temperature is relatively constant, being in the general neighborhood of 60°. Of course, if a service station operated only in the summer its shrinkage in the summer months, when gasoline is delivered at high temperatures, would not be offset by the increase in bulk in the cold months. As anyone knows, the winter of 1960-61 was unusually cold. Gasoline delivered during those months must have expanded in the underground tanks of the service station and the dealer would have been able to pump out more gas than he purchased, thereby overcoming any losses due to shrinkage in the summer months.

A study made by the Bureau of Weights and Measures of the City of Richmond in 1934 showed, on the basis of nine separate tests made under normal climatic conditions, the temperature of the tank truck delivering to the service station averaged 57.7° while the temperature of the underground tanks at the station averaged 65.1°; in 8 of the 9 tests there was an actual gain in volume during underground storage. In one test there was no change in volume.

According to the Encyclopedia Americana, the average year-round temperature in Virginia is less than 60°—58.65° to be exact. The temperature chart exhibited by the Associations on behalf of the service stations did not show the result to the service station of deliveries to the dealer when the outside temperature is below that of the tanks and the gasoline expands in volume when it is placed in the underground tanks of the service station and the operator is able to sell more gasoline to the motorist than he has purchased from his supplier. There are, of course, variations in the average temperature of various sections of the State but we do not believe that any of these are large enough to give rise to any substantial basis for a refund for shrinkage and, as we pointed out earlier, no case was made for evaporation. It is therefore our conclusion that the service station operator is aided by underground temperatures in the winter though he may have suffered losses during the summer. Hence, we can see no justification for an allowance to the service station operator of a refund of any part of the tax on account of shrinkage and evaporation and handling costs.

## COMPENSATION FOR TAX COLLECTION

As stated earlier, the Associations also contended that the retailers should be compensated for collecting the tax. The Virginia gasoline tax statute imposes the major part of the responsibility for tax payment on the so-called licensed dealer—usually the refiner or the importer. The service station operator pays the tax when he buys the gas and in turn is compensated by the motorist when the gas is sold to the motorist. We feel that there is no merit in this contention.

## CONCLUSION

We wish to thank all who furnished information and gave the benefit of their views during the course of the study. We particularly desire to express our appreciation to those who served on the Committee for their contribution of time and effort and the assistance rendered to the Council thereby.

We are sympathetic to the position of those advocating the allowance and to all other small businesses and wish that something could be done to assist them. However, to the extent that assistance were given it would mean that the operators of motor vehicles would be subsidizing the operators of the service stations. The motor vehicle operator has his own losses of gasoline through overfilling, spillage, and otherwise and no allowance is made to him. Finally, we do not believe that the revenues of the Highway System should be diminished in order to compensate the operators of service stations for a loss which is probably made up by an equal gain.

Respectfully submitted,

ROBERT Y. BUTTON, Chairman  
CHARLES K. HUTCHENS, Vice-Chairman  
C. W. CLEATON  
JOHN WARREN COOKE  
JOHN H. DANIEL  
TOM FROST  
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### STATEMENT OF CHARLES R. FENWICK AND J. D. HAGOOD

We are in accord with the conclusion reached in the report that on the basis of the facts presented, it would be impractical to make a refund for gasoline losses.

However, the study shows the inequity which exists between the jobbers and the service station operators, and we feel that it is certainly proper to point this up in the report even though no recommendation is made. It seems to us that if the refund is fair to the jobber it is fair to the service station operator, and if not fair to the service station operator, then no refund should be made to the distributor.

CHARLES R. FENWICK  
J. D. HAGOOD