INTERNAL POLICY DIRECTIVE 2009 – 2

June 22, 2009

SALES AND USE TAX – AUDIT SAMPLING PROCEDURES

POLICY ISSUES:

1. What sampling methods may be utilized in the Department's sales and use tax audits?

2. Will the sampling methods used in the Department's sales and use tax audits conform with generally recognized sampling techniques and auditing standards?

3. Will the sampling methods used in the Department's sales and use tax audits yield accurate and defensible results?

POLICY DETERMINATIONS:

1. Electronic statistical sampling, manual random sampling and judgmental block sampling are the sampling methods that may be used in the Department's sales and use tax audits.

2. The sampling methods used in the Department's sales and use tax audits conform with generally recognized sampling techniques and auditing standards.

3. The sampling methods used in the Department's sales and use tax audits will yield accurate and defensible results.

DISCUSSION:

I. Guidelines.

One of the three sampling methods outlined below may be used to conduct a sales or use tax audit.

A. Electronic Statistical Sampling. When electronic records are available, statistical sampling procedures may be applied through use of the Department's statistical sampling software. (The auditor may use detail audit procedures and review all electronic records for the entire audit period, if the auditor determines this to be more efficient than using electronic statistical sampling.)

> **Stratification of the Population.** The population will be stratified into dollar ranges, the results of which will give a more accurate sample. In addition, stratification by accounts, locations, time periods, etc. prior to stratifying by dollars may be required to produce a more accurate result, depending on the taxpayer's business activities.

Determining the Dollar Range Breaks.

Low Dollar Range. This dollar range will be established, and should be agreed to by the taxpayer, prior to determining the ranges to be sampled.

1. Auditor judgment will be used to set the boundaries for this dollar range.

2. If, in the auditor's judgment, the dollar range is not cost effective to review, but material in amount, then projection of the error ratio determined from the adjacent stratum will be applied.

High Dollar Range. This dollar range will be established, and should be agreed to by the taxpayer, prior to determining the ranges to be sampled.

1. Auditor judgment will be used to determine this dollar range. All transactions in this dollar range will be examined in detail.

2. For cost efficiency, a balance of the top dollar range and the number of transactions should be considered.

Dollar Ranges to be sampled. Between the low and high dollar ranges, the number of stratified ranges to be sampled will depend on several factors.

1. The primary factor is the sample size as it relates to time efficiency and accuracy of the sample.

2. Other factors include the number of dollar ranges to sample, and the optimum strata breaks between the dollar ranges.

Confidence Level. The confidence level will be 90% in most cases, which will result in a sample that is both accurate and efficient. If the general characteristics of the population cannot, in the auditor's judgment, reasonably be determined, a higher confidence level may be necessary.

Precision Level. The precision level will be 10% in most cases, which will result in a sample that is both accurate and efficient. If the general characteristics of the population cannot, in the auditor's judgment, reasonably be determined, a lower precision level may be necessary.

Sample Size. The Department's statistical sampling software program will be used to determine both the overall sample size and the size of each stratified dollar range. A minimum of 30 sample items is required in each stratified dollar range, except there is no minimum number of sample items required in the high dollar range.

Audit Projection. The ratio estimation method will be used to project the results of each statistical sample. A separate percentage of error will be determined for each of the stratified dollar ranges and projected.

B. Manual Random Sampling. When electronic records are not available, manual random sampling may be used. A manual sampling universe will typically consist of individual transactions or clusters of transactions. If the auditor determines that manual random sampling cannot be used effectively, a detailed review of the records can be made with supervisory approval. Manual random sampling procedures may be applied using the guidelines outlined below.

Transactional Sampling/Minimum Sample Size. Sample sizes are based on the following formula:

$$\text{Sample size} = \frac{250}{\text{\% of items of interest in the population}}$$

There shall be a minimum of 250 transactions for the audit or 250 minimum per stratification range. The minimum sample size is only a guide. If the taxpayer's records are voluminous, auditor judgment should be used to determine if the minimum sample size should be increased.

Note: When the number of transactions exceeds 1,000, cluster sampling is more efficient. If the items of interest are 25% or less of the total population, cluster sampling will be used.

Cluster Sampling. Cluster sampling will be used when the minimum sample size exceeds 1,000 transactions.

Time period sampling. Based on the taxpayer's method of record retention, the time period sampled for one taxpayer may not be the same for another. Auditor judgment will be used to determine the appropriate period. The acceptable time periods are one of the following:

1. Days
2. Weeks
3. Months

Sample Testing. A precision variance test will be performed to ensure that the sample represents the population. The variance between the sample average and the population average should not be more than 15%. If it is more than 15%, the auditor must evaluate the sample, and consider alternatives, such as increasing or replacing the sample.

Evaluation of Results. The average dollar value of all sampling errors should be compared to each individual error. This may help identify particular classes of errors or items that may indicate an inadequately defined frame. Further refinement of the sampling frame may, in the auditor's judgment, be necessary.

Projection of Results. Ratio estimation is the preferred method of projection. The use of an alternative projection method by an auditor requires prior approval.

C. <u>Judgment Block Sampling.</u> A judgmental block sample is a non-random selection from a population from which a conclusion is drawn. This type of sample may be representative of the population to be audited. A block sample may be used where the auditor determines it to be the most efficient and cost effective.

II. Statistical and Random Sampling Techniques.

A. Sample Sizes and Random Number Generator. The Department will continue to use a statistical sampling software program to determine the sample data for all electronic audits. When the manual random sampling method is used, a Department-authorized software program will be used to determine sample size~~s~~ and the random selection of the sample.

B. Retrieval of Sample Documentation. It is recommended that the taxpayer retrieve all documentation needed to support the review of individual sample items.

C. Establishing the Integrity of the Population. The following factors, if relevant, must be considered when evaluating whether a sample is representative of the population, and when reviewing either an electronic or a manual sample, when identifiable, should be removed from the population prior to pulling the sample and reviewed separately:

- Credit and Debit Memos
- Extraordinary Items
- Bad Debts
- Missing Invoices
- Voids and Duplicates
- Installment Sales or Purchases
- Reclassifications

Utilities and Fixed Assets must be reviewed separately.

Sales and Use Tax Paid in Error.

1. Sales Tax and Seller's Use Tax Paid in Error.

    a. If the overpayment to a single vendor is based on $5,000 or less in purchases per year, the sample item will be listed as a credit and left in the sample.

    b. If the overpayment is based on more than $5,000 in purchases per year from a single vendor, those purchases must remain in the sample population as a non-exception, however detailed separately. It is the taxpayer's responsibility to detail such overpayments relating to each individual vendor for the audit period and to request credit directly from the vendor.

2. Use Tax Self-accrued and Direct Pay Accounts in Error. When use tax is paid in error to the state, credit will be given in the audit.

a. If the overpayment is based on $5,000 or less in purchases per year from a single vendor, the sample item will be listed as a credit and left in the sample.

b. If the overpayment is based on more than $5,000 in purchases per year from a single vendor, those purchases will remain in the sample and the population. If, in the auditor's judgment, these errors cannot be proven to be consistently occurring throughout the audit period, or the dollar amount of these errors are, in the auditor's judgment, substantial, these items will be shown as a non-exception and the taxpayer will be required to support the overpayment on an actual basis. If these overpayments can be proven to be consistently occurring throughout the audit period, the credits will be left in the sample and projected.

D. Projecting the Results. Ratio estimation is the preferred method of projection for both electronic and manual sampling audits. The ratio is the total error divided by the sample base. The error ratio is then multiplied by the projection base to arrive at the estimated audit adjustment.