**OBJECTIVE:** To document the audit sampling methods and considerations for both statistical and non-statistical sampling used in the conduct of the audit in accordance with SAS 39.

**CONSIDERATIONS:** Generally accepted auditing standards (SAS 39, AU 350.01) define audit sampling as:

...the application of an audit procedure to less than 100 percent of the items within an account balance or transaction class for the purpose of evaluating some characteristic of the balance or class.

**What Audit Sampling IS:** A test that involves application of procedures to less than 100 percent of the population for the purpose of projecting the results to the entire account balance or transaction class. Examples would include:

- Test of attributes on a sample of items for the purpose of concluding on the effectiveness of internal controls through projecting the results to all items
- Test of compliance on a sample of items for the purpose of concluding on compliance with laws, regulations or contract requirements through projecting results to all items
- Test of account balance or transaction class details on a sample of items for the purpose of projecting the results to the entire account balance or transaction class to conclude on the fair presentation of the balance or class

**What Audit Sampling IS NOT**: A test that involves application of procedures to less than 100 percent of the population but that DOES NOT involve projecting the results to the entire account balance or transaction class. Examples would include:

- Test or review of a few transactions to gain an understanding of the nature of the entity's operations or processes, but not to form a conclusion about effectiveness
- Test of a few transactions to clarify the auditor's understanding of the design of the entity's internal controls, but not to conclude on effectiveness
- Test of details limited to a specific group of transactions or items within an account balance or transaction class that have a distinct characteristic, such as all items over ISI, where results are not projected to the untested transactions or remaining balance of account or class

#### TRANSACTION CLASS OR ACCOUNT BALANCE: Expenditures (Goods and Services)

## WORK PAPER REFERENCE OF TESTING: H-2

#### TYPE AND OBJECTIVE OF SAMPLING TEST:

Test of control attributes for concluding on control effectiveness <u>X</u>

Test of compliance for concluding on the level of compliance

Substantive test of details for concluding on fair presentation

# DOCUMENTATION OF SAMPLING PLAN

| Definition of the Population to<br>be Tested<br>Sampling Unit                         | The population is either all the<br>items that make up the account<br>balance or transaction class, or the<br>portion of the balance or class<br>being tested. A portion of the<br>account balance or class is tested<br>through sampling when other items<br>in the population have been<br>separately tested.<br>The sampling units are the<br>individual items that will be subject<br>to testing, such as customer account<br>balances to be confirmed, invoices,<br>payroll, or utility bills.  | All expenditure transactions for<br>goods and services, <u>excluding</u><br>payroll, capital, and debt service.<br>Vendor Checks  |
|---|--|---|
| Deviation, Misstatement, or<br>Noncompliance Definition                               | Define what constitutes a deviation,<br>instance of noncompliance or a<br>misstatement. Only identify<br>controls, noncompliance or<br>misstatement important to<br>achieving objectives.  | No invoice or claim form,<br>unapproved purchase/payment,<br>incorrect invoice amount, check<br>differs from invoice, no evidence<br>of receipt, and improper<br>coding/classification. |
| Tolerable Rate Risk of<br>Deviations or Noncompliance<br>Or<br>Tolerable Misstatement | Tolerable rate risk is the level of<br>risk of deviations, noncompliance<br>or misstatement considered<br>acceptable (tolerable) while still<br>concluding positively as to the<br>audit objective.<br>For control and compliance tests, a<br><b>High</b> tolerable rate risk is<br>acceptable when experience<br>indicates a low level of errors or<br>fraud is expected, or when a<br>moderate control risk is desired<br>(i.e. inherent risk is other than<br>High). A <b>Low</b> tolerable rate risk is<br>acceptable when experience<br>indicates a higher level of errors or<br>fraud is expected, or when a low<br>control risk is desired (i.e. inherent<br>risk is High).<br>For substantive tests, use the lowest<br>monetary, tolerable misstatement<br>acceptable for the opinion units<br>involved. | For control and/or compliance<br>tests:<br>High<br>LowX<br>For substantive tests:<br>\$<br>Tolerable Misstatement   |
| Sampling Risk / Other   | In control tests, this risk is the<br>allowable risk of assessing control<br>risk too low.<br>In substantive tests, this risk is the<br>uncertainty resulting from not   | High <u>X</u>   |

| Procedures Risk / Risk of<br>Incorrect Acceptance or<br>Assessment | testing 100 percent of the<br>population.<br>If sampling is the only audit<br>procedure to achieve the audit<br>objective, consider sampling risk to<br>be <b>High</b> . If other effective audit<br>procedures will be applied to<br>balance or class, then consider<br>sampling risk to be <b>Low</b> .  | Low  |
|--|--|--|
| Expected Deviations,<br>Misstatement or<br>Noncompliance           | The expected rate is the auditor's best judgment, based on past experience or current understanding, as to the anticipated number or amount of deviations or misstatements from the sample. If the expected rate is more than 1/3 <sup>rd</sup> the tolerable rate, sampling is likely not going to be an efficient audit procedure.   | $1/3^{rd}$ of tolerable = $\frac{3\% \text{ of}}{\text{transactions tested}}$<br>Expected rate = $\frac{0\%}{2}$ |
| Sample Size Computation  | For control and compliance testing<br>see chart below.<br>For substantive testing, us the<br>following formula:<br>(Dollar Value of Remaining<br>Population / Tolerable<br>Misstatement) x Risk Factor from<br>Chart Below<br>Note: If calculated sample size is<br>too high, consider reducing the<br>remaining population by stratifying<br>it and separately testing<br>individually large amounts. | Per controls testing chart below.<br>Sample Size <u>40</u>   |
| Sample Selection Method  | Description of how sample items were selected.   | Haphazard <u>X</u><br>Random <u>Systematic</u>   |

# MODEL FOR CONTROL & COMPLIANCE TESTS SAMPLE SIZE DETERMINATION

| Tolerable Rate of<br>Deviations/Noncompliance | Risk of Assessing Control<br>Risk Too Low | Sample<br>Size |
|---|---|----------------|
| Н   | L   | 25             |
| Н   | Н   | 40             |
| L   | L   | 40             |
| L   | Н   | 60             |

### RISK FACTORS FOR SUBSTANTIVE TEST SAMPLE SIZE DETERMINATION

| Desired Detection Risk | <b>Other Procedures Risk</b> |          |     |
|------------------------|------------------------------|----------|-----|
|                        | High                         | Moderate | Low |
| Low                    | 3.0                          | 2.3      | 1.9 |
| Moderate               | 2.3                          | 1.6      | 1.2 |
| High                   | 1.9                          | 1.2      | 0.9 |

#### DOCUMENTATION OF SAMPLING RESULTS EVALUATION

| Tolerable Rate of Deviations,<br>Noncompliance or Misstatement (Use<br>3% of Sample Size, or \$ Amount of<br>Tolerable Misstatement) | 40 x 3% = 1  |
|--|--|
| Number of Deviations, Instances of<br>Noncompliance or Amount of<br>Misstatement Detected from Sample                                | 0  |
| Likely Causes for Deviations,<br>Noncompliance or Misstatements  | N/A  |
| Projection of Deviations, Noncompliance<br>or Misstatements to Entire Population   | 0  |
| Conclusion   | Internal controls over the existence and presentation<br>assertions of goods and services expenditures appear to be<br>operating effectively and can be relied upon in the<br>assessment of control risk for the audit objective related to<br>those assertions. |