

Training Procedure for Sampling

- 1.0 Purpose** - This procedure specifies the required elements for training on the [Drug Chemistry Administrative Procedure for Sampling](#).
- 2.0 Scope** - This procedure applies to trainees in Drug Chemistry at the Raleigh, Triad and Western locations of the State Crime Laboratory.
- 3.0 Procedure**
- 3.1 Objectives**
- 3.1.1** Use the [Drug Chemistry Administrative Procedure for Sampling](#) properly in casework and explain its use to a jury.
 - 3.1.2** Participate in a review session with the Training Coordinator (or his or her designee) based on the [Drug Chemistry Administrative Procedure for Sampling](#).
 - 3.1.3** Document casework sampling scenarios provided by the training staff using Forensic Advantage (Staging or Proficiency).
 - 3.1.4** Successfully complete a written exam.
- 3.2 Study Questions**
- 3.2.1** Definitions to review:
 - 3.2.1.1** Administrative Sample Selection
 - 3.2.1.2** Homogenous
 - 3.2.1.3** Hypergeometric Sampling Plan
 - 3.2.1.4** Population
 - 3.2.1.5** Sample Selection
 - 3.2.1.6** Sampling
 - 3.2.1.7** Sampling Plan
 - 3.2.1.8** Sampling Procedure
 - 3.2.1.9** Threshold Sample Selection
 - 3.2.2** An inference about the whole population may be made under what sampling plan?

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- 3.2.3 What is the minimum number of units that must be present in a population to use Hypergeometric Sampling?
- 3.2.4 When are net and gross weights used in analysis?
- 3.2.5 How are net and gross weights reported (with applicable measurement assurance) for the following examples?
- 3.2.5.1 Opiate or amphetamine tablets
- 3.2.5.2 Non-pharmaceuticals
- 3.2.5.3 Less than five grams of marijuana cigarettes
- 3.2.5.4 Gross weight of plastic containing black, sticky material
- 3.2.6 Explain an example of when to use the following:
- 3.2.6.1 Administrative Sample Selection
- 3.2.6.2 Threshold Sample Selection
- 3.2.6.3 Hypergeometric Sampling Plan

3.3 Practical/Laboratory Exercises

- 3.3.1 Review and discuss the [Administrative Procedure for Sampling](#), FA worksheet samples, sample report and selected casework examples with the Training Coordinator (or his or her designee).
- 3.3.2 Using Forensic Advantage (Staging or Proficiency case records), document case notes and generate reports in accordance with the [Administrative Procedure for Sampling](#) based on scenarios provided by the training staff.
- 3.3.3 Show the calculations and the appropriate results, including applicable measurement assurance, for the following example.
- 3.3.3.1 Item 1: 200 glassine bags containing tan powder.
Net weights of first three units:
- 0.0210g
 - 0.0211g
 - 0.0212g
- 3.3.3.2 Provide any additional weights that are needed to complete this exercise.
- 3.3.3.3 Assume all bags chemically analyzed confirmed the presence of heroin.

3.3.3.4 If applicable, record the number of bags in Hypergeometric sample to be individually analyzed. Number of bags = _____

3.3.4 Show the calculations and the appropriate results, including applicable measurement assurance, for the following example.

3.3.4.1 Item 1: 4525 glassine bags containing tan powder.

3.3.4.2 Use the Hypergeometric Sampling Plan and extrapolate the weight of additional glassine bags needed due to a threshold amount of material present.

3.3.4.3 Provide any additional weights that are needed to complete this exercise.

3.3.4.4 Assume all bags chemically analyzed confirmed the presence of heroin.

3.3.4.5 Number of bags in Hypergeometric sample to be individually analyzed = ____

3.3.4.6 Net Weight of Hypergeometric number of bags = 0.8236 (+/- ____ gram)

4.0 Required Reading

4.1 [Drug Chemistry Administrative Procedure for Sampling](#)

5.0 References

“Guidelines on Representative Drug Sampling.” *United Nations Office on Drugs and Crime*. New York: United Nations, 2009.

Frank, Richard S., et al. "Representative Sampling of Drug Seizures in Multiple Containers." *Journal of Forensic Sciences*, JFSCA. Vol. 36, No. 2, (March 1991) 350-357.

“PART III A - Methods of Analysis/Sampling Seized Drugs for Qualitative Analysis.” *SWGDRUG Recommendations 5th ed.* January 29, 2010.

6.0 Records

- Drug Chemistry Training Checklist
- Section Completion Summary
- Example Laboratory Report
- Example Worksheet
- Hypergeometric Calculations Data

7.0 Attachments – N/A

Revision History		
Effective Date	Version Number	Reason
Dec 13, 2010	1	Original Document
09/17/2012	2	Example of extrapolation of weights added to Hypergeometric Plan. Added definitions for sample selection and sampling. Added Item 10 extrapolation example to Example Lab Report. Removed Training Checklist specific to this section. Removed Editing Required and Excel Spreadsheet attachments.
05/10/2013	3	Footer - Correct page numbering. 1.0, 3.1.1, 3.2.1 - Revised name of Sampling Plan from Technical to Administrative Procedure. 3.3.1 - Alphabetized list of definitions.
12/06/2013	4	Added issuing authority to header
08/10/2015	5	3.3.1 – Added casework examples to review session 3.3.2 – Added case documentation in FA 3.3.3 thru 3.3.4.5 - Edited existing and added new practical exercise
08/17/2018	6	3.2.5 – Added “net and gross” 3.2.5.3 – Removed slash mark