4. Control of Equipment, Instruments, Reagents, Chemicals, and Scientific Supplies

A. Equipment and Instruments

1. Procurement

All equipment and instrument requisitions will be approved by the Section Supervisor.

2. Instrument/Equipment Inventory Log and Annual Instrument/Equipment Inspection

An inventory log will be maintained on all instruments and equipment assigned to the Section by the Section Supervisor. This log will include the following information:

Equipment Item	Life Expectancy
Sticker Number	Model Type
Serial Number	Model Number
Year Purchased	Operating Status
Year to Replace	Purchase Price
Replacement Cost	Annual Maintenance Cost

An annual inspection of instruments and equipment in the Section will be coordinated by the Section Supervisor to update the instrument/equipment inventory log.

3. Operating Manuals

Operating manuals and warranty information provided by the manufacturer will be maintained by the chemist who is designated primary operator for the instrument. The operating manuals should be kept in a location close to the instrument so as to be accessible to any chemist utilizing the instrument.

4. Training

Operators of instruments will be knowledgeable in their use. Operator training will occur during the Chemist Training Program and will cover the manufacturer's instructions, theory of application, procedures to be used, and any calibration requirements. Operator training will also include in-house training by the primary operator of the instrument and specialized training schools and seminars.

5. Equipment Maintenance Forms and Annual Inspection Reports

Whenever an instrument or other equipment requires service or maintenance outside routine maintenance, that fact will be documented on a monthly "Laboratory Instrument and Equipment Repair Record" form (**Appendix A**). This form will be completed by the primary operator for the instrument and copies of the form will be submitted to the coordinator for the instrument and the Supervisor.

6. Instrument Calibration/Certification

The following instruments require calibration or a certification of the calibration: ultraviolet spectrophotometers, infrared spectrophotometers, gas chromatographs/mass spectrometers, blood alcohol gas chromatographs, and the immunoassay systems. These instruments will be calibrated/certified on an appropriate schedule using the appropriate standards. Instrument calibration/certification will be documented and these calibration records will be maintained by the coordinator for the instrument. The instrument calibration requirements are contained in the Section Technical Procedures Manual.

7. Balance Calibration/Certification

Electronic balances assigned to individual chemists will be calibrated or have the calibration certified by the chemists on a monthly basis using standard weights. A log will be maintained on each assigned balance by the assigned chemist.

Electronic balances that are not assigned to an individual chemist will be calibrated or have the calibration certified with a standard weight each time the balance is used by a chemist to weigh evidence.

All balances in the Section will be serviced and calibrated at least once a year by a qualified service contractor.

B. Reagents, Chemicals, and Scientific Supplies

1. Sources of Reagents, Chemicals, and Scientific Supplies

The Section Supervisor and the Coordinator for the Toxicology Unit will maintain a listing of commercial sources for reagents, chemicals, and scientific supplies used in the Section.

2. Procurement of Reagents, Chemicals, and Scientific Supplies

All orders for reagents, chemicals, and scientific supplies will be requested through the Section Supervisor. Copies of all orders will be maintained for a period of three years.

3. Receipt of Reagents, Chemicals, and Scientific Supplies

All reagents, chemicals, and scientific supplies that are received into the Section will be transferred to the Section Supervisor. If the Section Supervisor is not available, or if the received items require storage under special conditions, then an invoice of the received items must be made and given to the Section Supervisor. The invoice should list all items received, the date received, and the location where the items were stored. The invoice should be signed and dated by the chemist who received the items.

4. Laboratory Prepared Reagents

Required reagents are listed in the Section Technical Procedures Manual. A formula for preparing the reagent, procedures for a quality control check of the reagent, expiration date of the prepared reagent, and safety concerns with the reagent are listed in the Technical Procedures Manual. Section chemists are to follow these directions when preparing reagents.

All reagents will be clearly labeled as to the contents of the container, date of preparation, and initials of the chemist who prepared the reagent. All reagents and chemicals should be stored under appropriate conditions.

5. Commercially Prepared Critical Reagents

A quality control check of commercially prepared critical reagents will be conducted each time the reagents are used in the analysis of evidence. The results of this quality control check will be entered in a log, which will be maintained in the Section for each instrument using commercially prepared critical reagents. The chemist will also record in the log the lot numbers and expiration dates of the reagents along with the laboratory file numbers of the evidence being analyzed.

6. Disposal of Reagents, Chemicals, and Scientific Supplies

Small quantities of reagents and chemicals may be properly disposed of by flushing down the laboratory sinks with adequate water.

Large quantities of reagents and chemicals, hazardous wastes, and biological wastes will be disposed of as directed in the Crime Laboratory Chemical Hygiene Plan and the Bloodborne Pathogen Compliance Program.

APPENDIX A

LABORATORY INSTRUMENT AND EQUIPMENT REPAIR RECORD

APPENDIX B

AUDIT DOCUMENT

LABORATORY INSTRUMENT AND EQUIPMENT REPAIR RECORD
DRUG CHEMISTRY SECTION

Month: _____ Year:

Equipment / Instrument	Manufacturer	Model No.	Serial No.	Room #	Service Date	Cost