

**FORENSIC SCIENTIST SUPERVISOR  
(FIREARMS & TOOLMARK ANALYST)  
MS-401-14**

**INTRODUCTION**

This position is located in the Office of the Deputy Mayor for Public Safety and Justice (ODMPSJ) in the Department of Forensic Sciences (DFS). The mission of the DFS is to provide high-quality, timely, accurate, and reliable forensic science services using best practices and best available technology, focusing on unbiased science and transparency, to enhance public safety and health.

**POSITION CONTROLS**

Works under the Forensic Science Laboratory Director, who provides administrative direction in terms of broadly stated objectives and available resources, new and unusual techniques, desired results, changes in regulatory constraints and, or methods and procedures that may apply to complex situations. The incumbent independently plans and carries out assignments, and interprets policies and procedures in terms of established objectives, and plans and carries out assignments; and determines the validity of methods and results and recommends acceptance or rejection. Exercises independent responsibility and is held accountable for actions and findings; and consults with the supervisor, other unit managers and/or laboratory directors on unusual technical problems and best practices and keeps the supervisor apprised of any controversial issues.

The work is reviewed for potential impact on agency's accreditation, mission, objectives and program goals are normally accepted and being technically authoritative and accepted without significant change.

Guidelines include policies and procedures of DFS, including but not limited to the standard operating procedures developed by the Firearms Examination Unit through the validation of analytical procedures; governing laws and regulations of the District and Federal government, Mayor's Orders, instructions, and the Deputy Mayor's policy and priorities. Incumbent exercises sound judgment in choosing, interpreting, or adapting available standards and guidelines to specific issues or subject. Many situations are not covered by the guidelines, and therefore, require interpretation and adaptation.

Sound judgment is exercised when selecting, interpreting, or adapting available standards and guidelines to specific work situations and/or cases, however, many situations are not covered by the guidelines, and therefore, requires extensive interpretation and adaptation or research.

**DUTIES AND RESPONSIBILITIES**

The incumbent provides management and administrative responsibility for employees in the Firearms Examination Unit, Forensic Science Laboratory (FSL). Serves as a technical reviewer on all Firearm and Toolmark casework, which involves crimes against persons and property. Evidence includes firearms, bullets, bullet fragments, casings, and any other firearm materials found as evidence, including ammunition, magazines, or suppressors. Firearms evidence may further necessitate restoration of obliterated serial numbers, distance determination based on gunshot residue, establishing the trigger-pull weight of a firearm, and the operability of a firearm.

Evidence may also include toolmark evidence, including but not limited to impression evidence, damaged property, and any recovered tools that would be submitted for comparison. This requires supervising case work processes that is required to identify, analyze, and compare these evidence types; and supervises staff that provides expert interpretation to client agencies and the courts in the form of reports and testimony.

Supervises Firearms and Toolmark Analysts in the performance of their work identifying, analyzing, comparing, and interpreting evidence from crime scenes in the laboratory; prepares administrative reports; trains Firearms and Toolmark Analysts in all aspects of their duties and responsibilities.

Works in conjunction with the Deputy Director of Quality Assurance and other management personnel, through the Forensic Science Laboratory Director, to ensure accreditation standards are met.

Ensures that the Analysts identify, analyze, compare, and interpret evidence in criminal investigations; and the work is performed in a laboratory. The types of crimes include person crimes, such as homicides, sexual assaults, and robberies, as well as property crimes and traffic accidents. The types of cases that might be encountered in the laboratory could include, but are not limited to the following:

- Ballistics (bullets, cartridges, casings)
- Identification of types of weaponry/triggers/barrel/mechanics of the weapon, etc.
- Identification of ammunitions
- Analysis of tool marks
- Restoration of serial numbers
- Test-firing of weapons in the lab
- Analysis of powder residue/burns/patterns
- Determining the caliber weapon
- Determining the trigger pull weight of a weapon
- Reconstruction of projectile evidence
- Reconstruction of a shooting scene of crimes

Trains staff in how to effectively testify in court and personally testifies in court as an expert witness in connection to the evidence analyzed; studies new techniques and procedures in scientific analysis, collection, and processing; participates in a structured training program; demonstrates continuous effort to improve operations, decrease turnaround times, streamline work processes, and work cooperatively and jointly to provide quality seamless customer service.

Reviews and approves training, competency, and proficiency tests used by the Unit. Monitors expenditures for the Unit and works with the Forensic Science Laboratory Director on budget matters.

Acts as initial point of contact for case inquiries from investigators and attorneys and screens examination requests.

Communicates proactively with stakeholders regarding progress, issues and plans for resolution.

Reviews and documents approval for all validations and methods utilized.

Provides the full range of supervisory services, as required to manage and direct the work efforts of subordinate staff and activities of assigned operations. Develops quantitative and qualitative

measures for evaluating the work performance of the staff. Supervises and assigns duties and responsibilities; formulates overall plans for resources; approves and disapproves leave requests; recommends job selections, promotions, incentive recognition and corrective or adverse actions; establishes work standards; and identifies developmental and training needs.

Performs other related duties as assigned.

### **OTHER SIGNIFICANT FACTS**

Mastery of and skill in applying Firearms and Toolmark analysis principles, techniques, methods, theories, concepts, practices, and standards.

Mastery of forensic laboratory accreditation, standards, and guidelines; and of the tools necessary to evaluate the evidence.

Ability to establish new standards and assists with identifying training needs and resource requirements for the agency.

Mastery of new analytical developments, and ability to modify processes to resolve novel, obscure, or highly controversial problems that affect the analysis.

Ability to initiate, formulate, and plan, as well as execute Firearms and Toolmark analysis.

Mastery knowledge of, and skill in applying analytical and evaluative methods and techniques to conduct in-depth research of operational/program issues; to review and analyze complex reports; to develop necessary plans; and to prepare clear, in-depth reports of studies and recommendations.

Mastery research skills, interpretation, and application of a broad range of qualitative and quantitative data using a variety of diverse methods.

Expert knowledge of quality assurance and quality improvement methods and techniques; and knowledge of accreditation standards and quality processing methods that are crucial as well as beneficial to the quality assurance program.

Ability to keep up-to-date of current literature and sources of information in the field of forensics for firearm and toolmark analytical methods, including but not limited to all forms of microscopy, chemical analysis of gunshot residue and lead, and the safe handling and function of all major firearms.

Experience in operational forensic laboratories; quality assurance and control; statistics; and basic rules of evidence.

Personal experience to assess and evaluate a variety of situations, problems, conditions, etc.

Mastery of and skill sufficient to establish and monitor quality control in the firearms section as well as an in-depth knowledge of the principles, techniques, and instruments to determine quality control measures needed to control samples, to respond to proficiency testing programs and to establish and maintain copious record keeping systems.

Ability to work well both independently and as part of a professional management team in a multi-cultural workplace and interpersonal skills is required to work effectively with a diverse staff, external agencies, and the public.

Expertise in modifying or adapting standard processes and procedures, assesses, selects, and applies remedies suited to the assigned problem or situation; and assesses the environmental impact of various practices.

Excellent oral and written communications skills sufficient to prepare and present pertinent information and research involving complex workforce development policies and initiatives, and represent the agency; and knowledge of and skill in communication and public relations techniques sufficient to effectively represent the agency at conferences, meetings and consultations with agency managers, employee groups, and special interest groups concerning program objectives and issues.

Ability to supervise and skill to lead a subordinate staff.

Demonstrated skill and ability to use a PC and software packages (e.g., Microsoft Word, Excel, Access and Power Point, etc.) and software applicable to various reporting systems, particularly laboratory information management systems (LIMS), inventory control, and NIBIN software.

May be required to work weekends and holidays.

Specialized Experience: Bachelor of Science degree in a chemical and physical science from an accredited university; and preferred five (5) years of experience, including two years at a supervisory level of responsibility.

### **SPECIAL REQUIREMENTS**

This position's duty station will be housed within the Consolidated Forensic Laboratory (CFL) which is a protection-sensitive facility. As such, incumbents of this position shall be subject to criminal background checks, background investigations, and mandatory drug and alcohol testing, as applicable. Due to the handling of primary evidence, the applicant will be required to submit a buccal swab for the purposes of the DNA Quality Control database for the DFS.

The nature of the DFS mission necessarily involves the potential risks associated with biological or chemical hazards, including morgue functions. Although contact with these functions is intended to be minimal, the risks are nevertheless possible; training to recognize, address, and mitigate these risks is required as is dealing with potentially personally difficult topics, such as crime, death, and disease.

The nature of the work in the Firearms Examination Unit requires the safe handling and processing of firearms within the unit. Mastery of all standard firearms safety processes must be constantly demonstrated and reinforced.