# NOTICE OF PROPOSED CLASSIFICATION ACTIONS BY THE HUMAN RESOURCES DIRECTOR

The following actions are being posted in accordance with Civil Service Rule 109. In the absence of a protest addressed to the Human Resources Director, the proposed changes will become final seven (7) calendar days from the posting date.

Posting No: 1

Fiscal Year: 2019/2020 Posted Date: 07/08/2019

Reposted Date: N/A

# AMEND THE FOLLOWING JOB SPECIFICATION(S): (Job specification(s) attached)

Item #	Job Code	Title
1	2403	Forensic Laboratory Analyst
2	2456	Forensic Toxicologist
3	2457	Forensic Toxicologist Supervisor
4	2458	Chief Forensic Toxicologist

Protests on an item should be addressed to the Human Resources Director and can be submitted by mail to the City and County of San Francisco, Department of Human Resources, 1 South Van Ness Ave, 4th Floor, San Francisco, CA 94103 or by email to <a href="mailto:DHR.ClassificationActionPostings@sfgov.org">DHR.ClassificationActionPostings@sfgov.org</a>. All protests must be received in writing no later than close of business seven (7) calendar days from the posting date, and must include the posting and item number(s), the basis on which the protest is submitted and identify the affected parties.

Copies of this notice may be obtained from the Department of Human Resources or from the website at: <a href="http://sfdhr.org/index.aspx?page=109">http://sfdhr.org/index.aspx?page=109</a>. Copies of Civil Service Rule 109 may be obtained from the Department of Human Resources, the office of the Civil Service Commission at 25 Van Ness Ave, Suite 720, San Francisco, CA 94102 or from the website at: Rule 109 Position Classification and Related Rules | Civil Service Commission.

cc: All Employee Organizations

All Departmental Personnel Officers

DHR - Class and Comp Unit

DHR - Client Services Unit

DHR - Employee Relations Unit

DHR - Recruitment and Assessment Unit

DHR - Client Services Operations

Micki Callahan, DHR

Michael Brown, CSC

Sandra Eng, CSC

Christopher Colandene, SFERS

Theresa Kao, Controller/ Budget Division

E-File

**Title: Forensic Laboratory Analyst** 

Job Code: 2403

#### **DEFINITION**

Working in the Forensic Laboratory Division of the Office of the Chief Medical Examiner under supervision of the Forensic Toxicologist Supervisor and the direction of the Chief Forensic Toxicologist/Forensic Laboratory Director, the Forensic Laboratory Analyst is a forensically-trained scientist that receives, accessions, stores and disposes of biological and physical evidence; performs volatile, drug and poison screens in biological specimens; performs chemical extractions of drugs and poisons from body tissues and fluids for confirmatory analyses; prepares biological tissues and organs for diagnostic examinations by Medical Division staff; prepares chemical reagents, cleans scientific glassware and maintains the laboratory premises; assists in the forensic toxicological analyses; records findings; and performs related duties as required. Nature of work involves continuous exposure to health hazards and disagreeable elements.

## **DISTINGUISHING FEATURES**

Positions in this class are assigned to the Forensic Laboratory Division of the Office of the Chief Medical Examiner where sudden, unexpected or violent deaths as well as human performance toxicology cases are examined. The incumbent performs a variety of work in the Forensic Laboratory Division. In addition to the more routine laboratory work, such as cleaning and preparing scientific glassware, computers and analytical equipment and instrumentation, the incumbent extracts and analyzes blood, urine and body tissues to determine the presence and quantity of drugs and poisons.

This class is distinguished from class 2402 Laboratory Technician I in that incumbents work in a forensic setting and perform laboratory duties involving medico-legal cases.

#### SUPERVISION EXERCISED

None

## **EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES**

- Receives and logs in all physical and biological evidence and specimens from the morgue and from law enforcement representatives and verifies labeling; ensures correct storage and disposal of all evidence and specimens; cleans and arranges glassware; sterilizes laboratory and computer equipment; prepares reagents; cleans and maintains premises of the Forensic Laboratory division.
- 2. Performs drug screens on various biological specimens, extracts drugs and poisons from blood, urine and body tissues; uses immunoassays, chromatographic, spectrophotometric and other analytical techniques to determine the presence and/or quantity of drugs.
- 3. Performs forensic alcohol determinations and quantitations on physiological specimens in accordance with specified methods under Title 17, California Administrative Code of the State Department of Public Health.
- 4. Accurately records findings and data on worksheets; may assist in the interpretation of data and the preparation of case reports, and testifies in court proceedings.

**Title: Forensic Laboratory Analyst** 

Job Code: 2403

- 5. Prepares forensic microscopic slides and makes routine and special stains as required, including the preparation of necessary reagents and solutions; assists in labeling and sending specimens for outside medicolegal tests and assists in reporting possible infections to the appropriate agencies.
- 6. Performs related duties as assigned.

## KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of: basic principles and practices of forensic toxicology, pharmacology, chemistry or forensic science; applicable legal terms, court procedures, and the laws of evidence; analytical instrumentation and equipment, as well as computer software and hardware needed to perform difficult and complex laboratory-based examinations; special care and handling of laboratory glassware; methods and procedures used in thorough cleaning and sterilizing of laboratory equipment; procedures for working with and minimizing job-related chemical and biological hazards, including procedures for safe handling of chemical and biological laboratory waste; principles of statistical analysis relative to laboratory practice and process.

<u>Ability or Skill to:</u> conduct forensic laboratory casework using complex analytical instrumentation and equipment; follow detailed analytical protocols, carefully collect, analyze, evaluate and interpret case data obtained in the course of forensic investigations; speak and communicate technical information in a clear and understandable manner appropriate to the understanding of the listener or the legal decider of fact; listen and effectively elicit information; testify in courts of law on matters related to the forensic laboratory findings; utilize computers for word processing, spreadsheets and presentations.

#### MINIMUM QUALIFICATIONS

These minimum qualifications establish the education, training, experience, special skills and/or license(s) which are required for employment in the classification. Please note, additional qualifications (i.e., special conditions) may apply to a particular position and will be stated on the exam/job announcement.

#### Education:

Possession of a Bachelor's degree from an accredited college or university in one of the natural sciences with 16 semester hours in general & organic chemistry, statistics and two analytical (including quantitative analysis) and/or interpretive courses in forensic toxicology, pharmacology, chemistry or forensic science; AND

#### Experience:

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#### License and Certification:

Possession of a valid California Driver License; AND

Eligibility for certification by the State of California Department of Public Health as a Title 17 Forensic Alcohol Analyst or Forensic Alcohol Analyst Trainee (certification must be obtained before the end of the probation period and maintained as a condition of employment); AND

Coursework sufficient to eventually meet the certification requirements by the American Board of Forensic Toxicology as Diplomate (certification must be obtained as soon as ABFT experi-

**Title: Forensic Laboratory Analyst** 

Job Code: 2403

ence and training requirements are met and maintained as a condition of employment);.

**Substitution:** 

#### SUPPLEMENTAL INFORMATION

Special Requirements: Nature of duties may require sustained physical effort involving manual skill, dexterity, hand/eye coordination, and the ability to lift and carry equipment and supplies up to 50 lbs. Requires close mental attention and concentration for long periods when conducting various tests and the technical skill and ability to make accurate observations and determinations and prepare related reports of findings. Work environment may entail exposure to biohazards and potentially toxic chemicals, specimens from infectious and decomposed cases and/or persons who have died of drug or chemical poisoning; unpleasant odors or conditions; and exposure to disagreeable elements or situations inherent in this specialized field. This work requires compliance with department policies pertaining to blood borne pathogen exposure prevention, biohazard exposure prevention, toxic chemical exposure prevention, evidence handling and security requirements on evidence, standards and information.

#### **PROMOTIVE LINES**

**ORIGINATION DATE**: 10/19/1987

**AMENDED DATE:** 08/20/15: **07/XX/19** 

**REASON FOR AMENDMENT:** To accurately reflect the current tasks, knowledge, skills & abilities,

and minimum qualifications.

BUSINESS UNIT(S): COMMN SFCCD SFUSD

**Title: Forensic Toxicologist** 

Job Code: 2456

#### **DEFINITION**

Working in the Forensic Laboratory Division of the Office of the Chief Medical Examiner under the supervision of the Forensic Toxicologist Supervisor and the direction of the Chief Forensic Toxicologist/Forensic Laboratory Director, the Forensic Toxicologist is a forensically-trained scientist who performs a range of laboratory procedures following established protocols in the process of ensuring that all forensic specimens are processed and tested in a proficient, reliable and accurate manner.

#### **DISTINGUISHING FEATURES**

This class is assigned to the Forensic Laboratory Division of the Office of the Chief Medical Examiner. Incumbents in this class independently perform professional journey-level chemical, biological and/or pharmaceutical analytical duties related to forensic cases submitted to the Office of the Chief Medical Examiner for forensic investigation. This classification is distinguished from Class 2457 Forensic Toxicologist Supervisor, in that the latter provides first-line supervision and oversight to subordinate professional and technical staff.

## SUPERVISION EXERCISED

None

## **EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES**

- 1. Interacts with other Department divisions, Medical, Investigative, and Administrative staff members, external policing agencies, State and Federal entities, and other San Francisco City government agencies.
- 2. Receives evidence submitted for the purpose of detecting drugs and/or chemicals, controlled substances, prescription compounds and various poisons; ensures specimens are accessioned into the laboratory and stored according to forensic requirements; maintains a legal chain of custody for all evidence; releases forensic evidence to authorized personnel in accordance with departmental policy and legal requirements.
- 3. Evaluates all evidence submitted for analysis to determine if the quality and quantity is adequate for scientific testing; performs detailed and complex qualitative and quantitative evaluations of forensic specimens, including blood, urine, tissue, vitreous and other biologic specimens or physical evidence; identifies, confirms and quantitates levels of drugs and/or chemicals, using a variety of laboratory and analytical procedures (e.g. GC, GC/MS, LC/MS, LC/TOF-MS, Immunoassays, etc.), and following standard forensic toxicology and chemistry analytical procedures consistent with the Laboratory's Standard Operating Procedures.
- 4. Performs forensic alcohol determinations and quantitations on physiological specimens in accordance with specified methods under Title 17, California Administrative Code of the State Department of Public Health.
- 5. Prepares forensic microscopic slides and makes routine and special stains as required, including the preparation of necessary reagents and solutions; assists in labeling and sending

**Title: Forensic Toxicologist** 

**Job Code: 2456** 

specimens for outside medicolegal tests.

- 6. Participates in proficiency tests in order to comply with national and state quality assurance standards; attends training classes and professional meetings to keep abreast of current professional standards and methodologies; and researches technical journals, textbooks, and proprietary publications to determine the best methods of performing laboratory tests.
- 7. Records data; compiles case folders containing all required documentation, charts, and printouts in appropriate format for review and archiving; prepares legal reports representing the results of all the analyses performed.
- 8. Sets up laboratory apparatus; maintains equipment, inventory of supplies, and premises of the laboratory; maintains service records for all scientific instruments in the laboratory; achieves economies and/or prevents losses through proper handling of laboratory equipment, materials and supplies; performs established quality-control procedures to ensure proper functioning of laboratory equipment and use of reagents.
- 9. Reviews, authorizes, reports and interprets: forensic alcohol determinations and quantitations on physiological specimens in accordance with specified methods under Title 17, California Administrative Code of the State Department of Public Health; the analysis of other common drugs, alcohol and poisons assays within the laboratory, and; the analysis of testing performed from external reference laboratories.
- 10. Reviews casework for suitability of closure; signs and issues Laboratory reports; interprets findings resulting from casework.
- 11. Testifies in court to report laboratory findings and explain the theory, principles and method of analyses in order to support the laboratory findings and technical details; provides technical information and advice to the Medical Examiners, District Attorneys, City Attorneys, Public Defenders, Police Investigators and others as required.

## **KNOWLEDGE, SKILLS, AND ABILITIES**

Knowledge of: principles and practices of forensic toxicology, pharmacology and analytical chemistry, with specific application to the analyses of human body tissues and fluids; the interaction of organic and inorganic compounds, especially drugs, with human systems; applicable legal terms, code sections, court procedures, and the laws of evidence; analytical instrumentation and equipment, as well as computer software and hardware, needed to perform difficult and complex toxicology examinations; principles of instrument and detector function and maintenance; principles of quality assurance and methods of assuring accurate analysis; procedures for working with and minimizing job-related chemical and biological hazards, including procedures for safe handling of chemical and biological laboratory waste; principles of statistical analysis relative to laboratory practice and process.

Ability or Skill to: conduct forensic laboratory casework using analytical instrumentation and equipment; follow complex analytical protocols; carefully collect, analyze, evaluate and interpret case data obtained in the course of forensic investigations; apply specialized professional knowledge and skill in the use of scientific methods as a basis for formulating opinions or recommendations; read and evaluate technical, medical and legal reports and published data; prepare clear, concise and accurate scientific and other reports; speak and communicate technical information in a clear and understandable manner appropriate to the understanding of the

**Title: Forensic Toxicologist** 

Job Code: 2456

listener or legal decider of fact; listen and effectively elicit information; provide expert professional advice and testify as an expert in courts of law on matters related to the forensic laboratory findings; utilize computers for word processing, spreadsheets and presentations.

#### MINIMUM QUALIFICATIONS

These minimum qualifications establish the education, training, experience, special skills and/or license(s) which are required for employment in the classification. Please note, additional qualifications (i.e., special conditions) may apply to a particular position and will be stated on the exam/job announcement.

# **Education:**

Possession of a Bachelor's degree from an accredited college or university in a life science or physical science with 16 semester hours in general and organic chemistry courses, a statistics course, and two (2) analytical and/or interpretive courses in forensic toxicology, pharmacology and chemistry.

# Experience:

## **License and Certification:**

Possession of a valid California Driver License; AND

Possession of or eligibility for certification by the State of California Department of Public Health as a Title 17 Forensic Alcohol Analyst <u>within three (3) years of hire.</u>(certification must be obtained before the end of the probation period and maintained as a condition of employment); AND

Possession of certification by the American Board of Forensic Toxicology obtained within five (5) years of hire.

## Substitution:

#### SUPPLEMENTAL INFORMATION

Nature of duties may require sustained physical effort involving manual skill, dexterity, hand/eye coordination, and the ability to lift and carry equipment and supplies up to 50 lbs. Requires close mental attention and concentration for long periods when conducting various tests and the technical skill and ability to make accurate observations and determinations and prepare related reports of findings. Work environment may entail exposure to biohazards and potentially toxic chemicals, specimens from infectious and decomposed cases and/or persons who have died of drug or chemical poisoning; unpleasant odors or conditions; and exposure to disagreeable elements or situations inherent in this specialized field. This work requires compliance with department policies pertaining to blood borne pathogen exposure prevention, biohazard exposure prevention, toxic chemical exposure prevention, evidence handling and security requirements on evidence, standards and information.

**Title: Forensic Toxicologist** 

**Job Code: 2456** 

**PROMOTIVE LINES** 

To: 2457 Forensic Toxicologist Supervisor

**ORIGINATION DATE:** 01/12/1961

**AMENDED DATE:** 03/07/1988; 04/04/03; 11/04/05; 08/04/06; 08/20/15;

11/04/16; 05/30/17; 07/XX/19

**REASON FOR AMENDMENT:** To accurately reflect the current tasks, knowledge, skills & abilities,

and minimum qualifications.

BUSINESS UNIT(S): COMMN

**Title: Forensic Toxicologist Supervisor** 

Job Code: 2457

#### **DEFINITION**

Under the direction of the Chief Forensic Toxicologist/Forensic Laboratory Director, and following published protocols, the Forensic Toxicologist Supervisor assists in organizing and supervising the daily operations of the Forensic Laboratory Division including the Toxicology Section.

## **DISTINGUISHING FEATURES**

This class is assigned to the Office of the Chief Medical Examiner. An incumbent in this class provides first-line supervision and oversight to subordinate professional and technical staff in Forensic Laboratory Division, works under the Chief Forensic Toxicologist/Forensic Laboratory Director (Class 2458) to ensure that all forensic specimens are processed and tested in a proficient, reliable and accurate manner, and is responsible for conducting the more complex laboratory procedures and for ensuring that the technical proficiency of the laboratory is maintained. This class is distinguished from Class 2456 Forensic Toxicologist which performs journey-level forensic analytical duties related to medicolegal cases.

## **SUPERVISION EXERCISED**

Supervises the work of Forensic Laboratory Division Staff, including Forensic Toxicologists, Forensic Laboratory Analysts, and Public Service Aides.

## **EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES**

- 1. Supervises all daily Forensic Laboratory Division operations; oversees staff activities, work assignments, and analytic procedures; serves as a working professional supervisor providing technical guidance, training and review; assumes a leadership role in developing new methods of analysis and training; participates in lectures and training of forensic staff for toxicology and pathology; serves as second in command of the Forensic Toxicology Laboratory and speaks and acts for the Chief Forensic Toxicologist as appropriate or as assigned.
- 2. Assists the Chief Forensic Toxicologist in allocating laboratory resources, preparing budgets, and recommending laboratory purchases; ensures proper maintenance of equipment, inventory of supplies, and security of evidence and premises of the laboratory.
- 3. Reviews current professional literature to maintain currency in the forensic toxicology field and evaluates developments in instrumentation and methodology; develops parallel tests, recommends new methodologies and assists in the preparation of procedural protocols for all methods; supervises and maintains the Division's quality assurance program; reports the results of all proficiency testing and quality control results to the Chief Forensic Toxicologist/Forensic Laboratory Director, and develops and implements proficiency-test-related corrective actions.
- 4. Receives evidence submitted from the Medical Examiner or other law enforcement agencies for the purpose of screening, detecting and confirming/quantifying drugs and/or chemicals, controlled substances, prescription compounds and various poisons; ensures specimens

**Title: Forensic Toxicologist Supervisor** 

**Job Code: 2457** 

are logged in and stored according to forensic requirements; maintains a legal chain of possession for all evidence; releases evidence to authorized personnel in accordance with rules of possession, departmental policy and federal regulation regarding biologic evidence.

- 5. Performs the more detailed and complicated qualitative and quantitative analysis of forensic specimens, including blood, urine, and other biological evidence, for the presence of drugs and other toxic compounds; identifies and quantitates the levels of drugs and/or chemicals; uses and is proficient with analytical procedures such as enzyme-linked immunosorbent assays, gas and liquid chromatography; interprets molecular and spectral output of analytic results for chemical and drug identification and quantitation purposes; adds new drug and chemical information to the computer libraries and updates the programs as appropriate.
- 6. Accurately records data and interprets findings; prepares legal reports representing the sum results of the analysis performed.
- 7. Prepares chemical, enzymatic and/or physical extraction, dilution and/or concentration of specimens for organic and physical analysis; accurately prepares chemical solutions, and analytic extracts necessary for quantitative chemical analysis in accordance with standard forensic toxicology and organic quantitative analytic procedures.
- 8. Testifies in court to explain and support laboratory findings and technical details; provides technical information and advice to the Medical Examiners, District Attorneys, City Attorneys, Public Defenders, Police investigators, and others as required.
- 9. Serves as Forensic Alcohol Supervisor under the provisions of Title 17, California Administrative Code, and in accordance with the policies of the State Department of Public Health.

## KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of: principles and practices of biology, chemistry, pharmacology and forensic toxicology with specific application to the analyses of human body tissues and fluids; the interaction of organic and inorganic compounds, especially drugs, with human systems; applicable legal terms, code sections, court procedures, and the laws of evidence; analytical instrumentation and equipment, as well as computer software and hardware, needed to perform difficult and complex toxicological examinations; principles of instrument and detector function and maintenance; principles of quality assurance and methods of assuring accurate analysis; procedures for working with and minimizing job-related chemical and biological hazards, including procedures for safe handling of chemical and biological laboratory wastes; principles of statistical analysis relative to laboratory practice and process.

Ability or Skill to: supervise and train staff involved in forensic toxicological analysis; conduct toxicological studies using complex analytical instrumentation and equipment; interpret mass spectra results; follow complex analytical protocol, make accurate observations and carefully interpret data; analyze and evaluate data collected in the course of investigations; apply specialized professional knowledge and skill in the use of scientific methods as a basis for formulating opinions or recommendations; read and evaluate technical, medical and legal reports and published data; prepare clear, concise and accurate scientific and other reports; speak and communicate technical information in a clear and understandable manner appropriate to the understanding of the listener or legal decider of fact; listen and effectively elicit information; provide expert professional advice and testify as an expert in courts of law on matters related to

**Title: Forensic Toxicologist Supervisor** 

Job Code: 2457

forensic toxicology; utilize computers for word processing, spreadsheets and presentations.

## **MINIMUM QUALIFICATIONS**

These minimum qualifications establish the education, training, experience, special skills and/or license(s) which are required for employment in the classification. Please note, additional qualifications (i.e., special conditions) may apply to a particular position and will be stated on the exam/job announcement.

## Education:

Possession of a Master's degree from an accredited college or university in one of the natural sciences, with 16 semester hours in general and organic chemistry, statistics; two analytical (including quantitative analysis) and/or interpretive courses in forensic toxicology, pharmacology and chemistry.

## **Experience:**

Three years of professional experience in forensic toxicology, one (1) year of which must have been obtained within the last three (3) years.

## License and Certification:

Possession of a valid California driver's license at the time of appointment (License must be maintained as a condition of employment); AND

Possession of or eligibility for certification by the State of California Department of Public Health as a Title 17 Forensic Alcohol Supervisor <u>Analyst.</u>(certification must be obtained before the end of the probation period and maintained as a condition of employment); AND

Coursework and experience sufficient to meet the certification requirements by the American Board of Forensic Toxicology as Diplomate (Forensic Toxicology) (certification must be obtained by the end of the probation period and maintained as a condition of employment)

## **Substitution:**

Doctoral degree from an accredited college or university in one of the natural sciences may substitute for one (1) year of the required experience.

#### SUPPLEMENTAL INFORMATION

# **PROMOTIVE LINES**

To: 2458 Chief Forensic Toxicologist From: 2456 Forensic Toxicologist

**ORIGINATION DATE:** 03/07/1988

**AMENDED DATE:** 04/04/03; 04/18/14; 12/10/15; 11/04/16<u>: **07/XX/19**</u>

**REASON FOR AMENDMENT:** To accurately reflect the current tasks, knowledge, skills & abilities,

and minimum qualifications.

BUSINESS UNIT(S): COMMN

**Title: Chief Forensic Toxicologist** 

**Job Code: 2458** 

#### **DEFINITION**

Under the general direction of the Chief Medical Examiner, the incumbent in this class directs the operations and activities of the Forensic Laboratory Division .to ensure compliance with current professional forensic standards and applicable legal requirements.

## **DISTINGUISHING FEATURES**

Class 2458 Chief Forensic Toxicologist is distinguished from class 2457 Forensic Toxicologist Supervisor, which serves as the first-line supervisor to subordinate professional and technical staff, by its responsibility for the overall operation of the Forensic Laboratory Division, including the development, implementation and oversight of division policies, procedures and protocols.

#### SUPERVISION EXERCISED

Supervises the work of all Forensic Laboratory Division staff, including Forensic Toxicologist Supervisor, Assistant Forensic Toxicologists Forensic Laboratory Analysts and Public Service Aides.

## **EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES**

- 1. Directs the operations and activities of the Forensic Laboratory Division of the Office of the Chief Medical Examiner; plans, organizes, coordinates, supervises and evaluates all work in the toxicology laboratory; develops, recommends and implements policies, procedures and protocols for the division; enforces adherence to established department policies and procedures, including those governing specimen handling, processing and security, chain of custody, reporting and record keeping, release of specimens and disposal procedures consistent with the department's retention and disposal policy and state law; develops, updates and monitors compliance with a quality assurance program to ensure that all results reported by the laboratory are scientifically reliable, accurate and timely.
- 2. Develops and implements policies, procedures and protocols necessary to ensure compliance with current professional and legal standards, including: standards and procedures for specimen handling, processing and security, release and/or disposal of specimens in accordance with the department biohazard, blood borne pathogen and security policies; reporting and record keeping procedures; new methods for detecting drugs and other toxic materials; drug detection flow and analysis systems for effective and cost efficient drug analysis; procedures for maintenance and troubleshooting of scientific instrumentation faults, with return to service; validates all new drug assays and prepares a procedure protocol for each analytic method; develops cost benefit analyses for all new procedures.
- 3. Develops, implements and monitors training procedures, technical and performance standards for the toxicology and other forensic staff; develops complete, up-to-date and detailed step-wise procedure manuals to clearly delineate the division's standards, protocols, policies and procedures, and compliance with department policy; ensures that laboratory personnel are adequately and contemporaneously trained and proficient on analytical and instrument techniques, policies, procedures and quality assurance standards; ensures proper

**Title: Chief Forensic Toxicologist** 

Job Code: 2458

staff training on new equipment and software; maintains software upgrades.

- 4. Supervises, monitors and evaluates all work of the professional and technical staff; reviews and recommends to the Chief Medical Examiner personnel actions in the areas of performance, annual reviews, selection and disciplinary measures; oversees and reviews work of staff and advises subordinates on the more difficult aspects of the work, and in the analysis of case histories and data generated in each case; acts as a resource person, provides professional guidance, technical leadership and direction.
- 5. Reviews case reports and findings of subordinate technical and professional staff; makes certain that the analytic results are accurate and conform to case requirements, and signs all completed reports; interprets the data, confers with and advises the Chief Medical Examiner and Assistant Medical Examiners with respect to case results and cause of death determinations; discusses relevant issues with decedent's family.
- 6. Conducts and/or oversees difficult and complex toxicological examinations for forensically significant cases; conducts forensic alcohol determinations and quantitations in physiological specimens according to methods specified under Title 17, California Administrative Code of the State Department of Public Health; conducts and/or oversees analyses of blood, urine, other body tissues and evidence in cases that come to the Office of the Chief Medical Examiner including postmortem toxicology cases and human performance toxicology cases; uses complex analytical equipment and methods to determine the presence of drugs and other foreign compounds in forensically significant specimens.
- 7. Serves as the professional expert in forensic toxicology for the Office of the Chief Medical Examiner; consults with, interprets data for and advises physicians, law enforcement personnel, county attorneys and officials, and other agencies or commissions in matters pertaining to forensic toxicology; prepares technical reports and research proposals related to forensic toxicology; interprets toxicological data from external agencies; assists in case preparation and compiles technical reports, information and materials for presentation in court, and, if appropriate, makes recommendations with respect to legal action; testifies as an expert in court, at Police Commission or other Hearings, and at Medical Examiner's inquests on toxicological findings; and gives expert opinion on forensically significant toxicological data.
- 8. Oversees the maintenance, acquisition and upgrading of analytical instrumentation, equipment and computer systems; directs and plans the replacement, upgrading, installation, integration, maintenance, customization and enhancement of hardware, instruments and software; evaluates analytical instrumentation and equipment, as well as computer software and hardware, for compatibility with laboratory analytic flow scheme, feasibility and benefits; reviews current professional literature and recommends upgrades and improvements of analytical procedures, automation, instrumentation and direct online data transfer; ensures that all instruments and software are compatible with a LIMS for future growth of the department; ensures the effective maintenance of the equipment and supplies of the laboratory, including maintenance and troubleshooting of scientific instrumentation; ensures enhancement of a laboratory LIMS for a LAN to generate a summarized report of test results; interprets and integrates data collection from multiple instruments into a LAN for legal record and report production.

**Title: Chief Forensic Toxicologist** 

Job Code: 2458

9. Formulates the budgetary requirements of the Forensic Laboratory Division; makes staffing recommendations to the Chief Medical Examiner; evaluates needs and makes recommendations for new or replacement instrumentation, software and hardware.

## KNOWLEDGE, SKILLS, AND ABILITIES

<u>Knowledge of:</u> principles and practices of chemistry, biochemistry, pharmacology and forensic toxicology with specific application to the analyses of human body tissues and fluids; the interaction of organic and inorganic compounds, especially drugs, with human systems; applicable legal terms, code sections, court procedures, and the laws of evidence; analytical instrumentation and equipment, as well as computer software and hardware, needed to perform difficult and complex toxicological examinations; principles of instrument and detector function and maintenance; principles of quality assurance and methods of assuring accurate analysis of specimens.

Ability or Skill to: prepare clear, concise and effective written reports, procedures and protocols; speak and communicate technical information in a clear and understandable manner appropriate to the understanding of the listener or legal decider of fact; listen and effectively elicit information; utilize and evaluate computer systems instrumentation; organize, manage and coordinate laboratory activities at all levels; plan, assign, supervise, train and evaluate the work of subordinate personnel; conduct toxicological studies using complex equipment; interpret mass spectra results; perform independent research, prepare scientific reports, and articles for publication; review and evaluate technical, medical and legal reports and published data; apply specialized professional knowledge and skill in the use of scientific methods as a basis for formulating opinions or recommendations, particularly in a forensic context; interact effectively with representatives of other City agencies; provide expert professional advice and testify as an expert in courts of law on matters related to forensic toxicology; effectively teach forensic toxicology to all department staff and residents or fellows in medical or drug related training.

## **MINIMUM QUALIFICATIONS**

These minimum qualifications establish the education, training, experience, special skills and/or license(s) which are required for employment in the classification. Please note, additional qualifications (i.e., special conditions) may apply to a particular position and will be stated on the exam/job announcement.

## Education:

Possession of a doctorate degree from an accredited college or university in one of the natural sciences with advanced coursework in chemistry, pharmacology, or forensic toxicology.

#### Experience:

Three (3) years of professional experience in forensic toxicology, one year of which must be obtained within the last three (3) years.

## License and Certification:

Possession of a valid California driver's license

Certification by the State of California Department of Public Health as a Title 17 Forensic Alcohol <u>Supervisor-Analyst</u> (Certification must be obtained before the end of the probation period and maintained as a condition of employment).

**Title: Chief Forensic Toxicologist** 

Job Code: 2458

Coursework and experience sufficient to meet the certification requirements by the American Board of Forensic Toxicology as Fellow (Certification must be obtained by the end of the probation period and maintained as a condition of employment).

Substitution:

#### SUPPLEMENTAL INFORMATION

**PROMOTIVE LINES** 

From: 2457 Forensic Toxicologist Supervisor

**ORIGINATION DATE:** 

**AMENDED DATE:** 03/07/1988 (Retitled & Amended); 04/20/01; 04/18/14;

03/15/16: 07/XX/19

**REASON FOR AMENDMENT:** To accurately reflect the current tasks, knowledge, skills & abilities,

and minimum qualifications.

BUSINESS UNIT(S): COMMN SFCCD SFUSD