#### 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:
 21

 Fiscal Year:
 2016/2017

 Posted Date:
 10/28/2016

 Reposted Date:
 N/A

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

Item #	Job Code	Title
1	2456	Forensic Toxicologist
2	2457	Forensic Toxicologist Supervisor

**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 <u>DHR.ClassificationActionPostings@sfgov.org</u>. 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.

For additional information regarding this proposed classification action, please contact Victor H Vallejo, Clerk, at (415) 557-4894 or by email at <u>Victor.h.Vallejo@sfgov.org</u>.

Copies of this notice may be obtained from the Department of Human Resources or from the website at: <u>http://sfdhr.org/index.aspx?page=109</u>. 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: <u>http://www.sfgov3.org/index.aspx?page=328</u>.

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 Devin Macaulay, Controller/ Budget Division Theresa Kao, Controller/ Budget Division E-File

#### 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 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.

The Forensic Toxicologist performs forensic evaluations of evidentiary items including the identification, confirmation and quantitation of poisons, drugs and other chemicals in forensic specimens recovered as evidence during the investigation of medicolegal cases by various law enforcement agencies; performs forensic laboratory tests to determine if pathogenic microorganisms are present; processes specimens submitted for medicolegal diagnostic purposes, scientifically examines and evaluates the nature, origin and significance of physical evidence; records findings; interprets data; prepares technical laboratory records and reports of results of tests and examinations; testifies in courtroom proceedings and performs related duties as required. Incumbents are responsible for the accurate interpretation and recording of results from complex forensic laboratory analyses, for ensuring that data generated conforms to quality control specifications and for maintaining the carefully controlled legal chain of custody requirements. Nature of work involves continuous exposure to health hazards and disagreeable elements.

#### **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**

According to Civil Service Commission Rule 109, the duties specified below are representative of the range of duties assigned to this job code/class and are not intended to be an inclusive list.

1. 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.

2. 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/MS,

#### Title: Forensic Toxicologist Job Code: 2456

HPLC, Immunoassays, etc.), and following standard forensic toxicology, forensic chemistry and organic quantitative analytical protocols.

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. 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 the reporting of infections to the appropriate agencies.

5. 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.

6. Records data and interprets findings; 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.

7. 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.

8. 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.

9. Performs related duties as assigned.

## KNOWLEDGE, SKILLS, AND ABILITIES

<u>Knowledge of:</u> 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.

<u>Ability and Skill to:</u> conduct forensic laboratory casework using analytical instrumentation and equipment; follow complex analytical protocols; carefully collect, analyze, evaluate and interpret

#### Title: Forensic Toxicologist Job Code: 2456

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 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 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:

Six (6) years of full-time professional experience in forensic toxicology, one (1) year of which must be obtained within the last three (3) years.

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 or Forensic Alcohol Analyst Trainee (certification must be obtained before the end of the probation period and maintained as a condition of employment); AND

Possession of or eligibility for certification by the American Board of Forensic Toxicology as Diplomate (certification must be obtained by the end of the probation period and maintained as a condition of employment).

## Substitution:

Possession of a Master's degree or a Doctoral degree from an accredited college or university in one of the natural sciences may substitute for three (3) years of the required experience.

# Doctoral degree from an accredited college or university in one of the natural sciences may substitute for five (5) years of the required experience.

## 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

#### Title: Forensic Toxicologist Job Code: 2456

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**

To: 2457 Forensic Toxicologist Supervisor

ORIGINATION DATE:	1/12/61	
AMENDED DATE:	3/7/88; 4/4/03; 11/04/05; 8/04/2006; 8/20/15 <u>; <b>10/XX/16</b></u>	
REASON FOR AMENDMEN	To accurately reflect the current tasks, knowledge, skills and abil defined in the most recent job analysis conducted for this job cod	
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.; assigns, supervises and reviews the work of subordinate staff; makes recommendations on Divisional needs; performs complex and difficult forensic analyses of body tissues and fluids and other types of evidence for the presence, nature and quantity of chemical or toxic substances in forensically significant cases; prepares case reports; testifies in courtroom proceedings; and performs related duties as required.

### **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**

According to Civil Service Commission Rule 109, the duties specified below are representative of the range of duties assigned to this job code/class and are not intended to be an inclusive list.

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, 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.

# Title: Forensic Toxicologist Supervisor Job Code: 2457

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 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.

10. Performs related duties as assigned.

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

<u>Knowledge of:</u> 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.

<u>Ability and Skill to:</u> supervise and train staff involved in forensic toxicological analysis; conduct toxicological studies using complex analytical instrumentation and equipment; interpret mass

# Title: Forensic Toxicologist Supervisor Job Code: 2457

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 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 <u>16 semester hours in general and organic chemistry, statistics; two</u> <u>analytical (including quantitative analysis) and/or interpretive courses in forensic</u> <u>toxicology, pharmacology and chemistry</u> advanced course work in chemistry, pharmacology or forensic toxicology.

#### 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 (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

Title: Forensic Toxicologist Supervisor Job Code: 2457

### **PROMOTIVE LINES**

TO: 2458 Chief Forensic Toxicologist FROM: 2456 Forensic Toxicologist

<b>ORIGINATION DATE:</b> 3/7/88
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AMENDED DATE: 4/4/03; 4/18/14; 12/10/15<u>; 10/xx/16</u>

**REASON FOR AMENDMENT** To accurately reflect the current tasks, knowledge, skills and abilities defined in the most recent job analysis conducted for this job code.

BUSINESS UNIT(S): COMMN