Department of Toxic Substances Control

Position Duty Statement



Classification Title	Department
Information Technology Specialist II	Toxic Substances Control (DTSC)
Working Title	Office/Unit/Section/Geographic Location Environmental Information Management/System & Software
	Engineering/Headquarters
Position Number	Effective Date
810-250-1414-004	

Primary Domain: Software Engineering; Secondary Domain: System Engineering

Under the direction of the Information Technology Manager I (ITM I), the Information Technology Specialist II provides guidance and performs data architecture, database administration, and software development duties related to database applications development for the Cost Recovery Management System (CRMS). The incumbent employs enterprise data strategies and industry best practices to understand, document, maintain, control and plan data and system architecture design for the CRMS and related systems. Specific duties include, but are not limited to:

A. Specific Activities: Essential (E) / Marginal (M) Functions

30% (E) Data Architecture

Analyzes and interprets transactional, analytical, authored, and published information maintained in or regarding the CRMS and related enterprise systems. Interprets data using a holistic view of the flow of information as it relates to CRMS and the enterprise, including the effects of the processes that act upon the data and the impact of the context, content, and users on the system. Analyzes and interprets information to create data models for design and development in support of business needs. Maintains data models and data dictionary as changes are made to the business processes, CRMS, or related systems to ensure consistency and clear understanding for developers and users. Establishes an information solution strategy for CRMS and related system data through the definition of DTSC's business information assets and their sources, structure, classification, and associations. Plans, develops, and maintains data strategies to support business analysis. Architects data sources into a manageable structure that allows the dissemination of information to be captured, shared, analyzed, utilized, and governed throughout the enterprise, all lines of business, and external entities with confidence and reliability. Designs and implements enterprise data models using standardized modelling tools, system specifications, and industry best practices to align technology solutions with business strategies and provide for efficient data storage and retrieval. Reviews software architecture and makes recommendations regarding technical and operational feasibility. Designs, develops, and implements software that adheres to organizational enterprise architecture ensuring secure, reliable, and accessible solutions. Verifies stability, interoperability, portability, security, and scalability of CRMS architecture, and designs, implements, and maintains system architecture across multiple platforms to best align technology solutions with business strategies.

20% (E) Application Development

Oversees the activities of the CRMS project technical staff and vendor responsible for supporting the system, and ensures the efficiency of the transition, continued maintenance, and ongoing user support. Partners with Project Management Office (PMO) to receive requests for system enhancements, and participates in governance process to modify the system based on business and legislative needs. Designs testing methods, validation procedures, and execution plans to evaluate software functionality. Monitors and address issues with the Financial Information System for California (FI\$Cal) interface. Utilizes departmental and industry best practices to design, develop, and maintain the CRMS, sustain the most complex development needs, and provide secure and efficient access to the department's data. Provides technical expertise on applications development issues, and resolves the most complex problems and issues presented by DTSC staff, including those related to access to confidential or sensitive information and the implementation of cutting-edge functionality, such as mobile applications and mixed media integration. Mentors and trains information technology (IT) staff in complex technical areas, including proper development techniques. Creates and maintains efficient database designs, debugs software using various programming tools and systematic debugging methods, and reviews software code to ensure compliance with defined standards.

20% (E) Database Administration

Serves as the primary Microsoft SQL Server Database Administrator for CRMS to ensure optimal performance and provide reliable access to DTSC's data and information. Monitors the database execution environment and conducts audits of system capacity, performance, and traffic analysis. Provides system components capacity planning to ensure system sustainability, and performs configuration and release management. Coordinates infrastructure system design, modification, upgrade, and implementation projects. Works with network staff to install, configure, and maintain servers and databases to provide infrastructure required to host the DTSC's critical information systems. Serves as a subject matter expert on database administration, and provides guidance and assistance to other IT staff for proper and secure access to CRMS and related departmental data and information. Coordinates database maintenance with other server administrators and network staff to ensure continued public and staff access. Serves as the escalation point for troubleshooting CRMS components.

15% (E) Data Governance

Collaborates with the PMO to develop an Information/Data Management Framework for the CRMS to define the focus areas of data governance. Participates in data governance meetings and follows up on action items. Revises data governance practices to keep in step with enterprise information and data management requirements. Develops and implements standards and controls ensuring the security, reliability, and availability of system components. Partners with the Information Security Officer to ensure compliance with data security and privacy mandates, and designs and implements system access controls to maintain system security in accordance with information security best practices and standard IT operating procedures. Creates and implements backup and recovery strategies, and conducts disaster and recovery analysis, planning, implementation, and administration. Partners with program and product representatives to define how data is to be collected, stored, organized, distributed, and consumed. Participates in the creation of rules to govern the structure of DTSC's databases and file systems and the processes which connect the data with the business units.

10% (M) Other Related Duties

Performs other related duties including, but not limited to: creates, enhances, and maintains IT software solutions using various programming languages to meet department requirements and expectations with regards to efficiency and effectiveness; contributes to the planning of the overall organizational IT strategy; and communicates with stakeholders to determine organizational needs.

5% (E) Administrative Duties

Performs administrative duties including, but not limited to: adheres to Department policies, rules, and procedures; submits administrative requests including leave, overtime, travel, and training in a timely and appropriate manner; accurately reports time in the Daily Log system; and submits timesheets by the due date.

B. Supervision Received

The incumbent reports directly to and receives most assignments from the ITM I; however, direction and assignments may also come from the Chief Information Officer or Executive Office.

C. Supervision Exercised

None.

D. Administrative Responsibilities for Supervisors and Managers

None.

E. Personal Contacts

The incumbent has frequent contacts with all levels of DTSC staff and vendors, and the incumbent may occasional contact with members of the public that utilize DTSC's IT systems, external state agencies, and federal or local government representatives.

F. Actions and Consequences

As the Data Architect, the incumbent has access to all information stored within DTSC's IT systems, including confidential and sensitive information. Release of confidential or sensitive information to users who do not have authorization to receive this type of information could compromise enforcement actions, disrupt the deliberative decision-making process for sensitive projects, or result in DTSC being held liable for the release of such information. Failure to adequately support CRMS infrastructure could lead to cost recovery services being unavailable for DTSC staff or the public to utilize CRMS for a wide variety of work related functions. The consequences of losing these services, even temporarily, could have a significant and adverse financial impact on the Department. Failure to correctly identify business needs, processes, or associated data may result in lost opportunities to improve business processes and result in loss of productivity, customer dissatisfaction, and rework to align products with actual business needs.

G. Functional Requirements

The incumbent primarily works on a desktop computer in a cubicle environment in a high-rise office building in downtown Sacramento. The position requires bending and stooping, and the incumbent may occasionally be required to work in a climate controlled computer room. The incumbent will work with sensitive, confidential information and may work on controversial assignments. The incumbent may occasionally attend meetings, public hearings, and workshops or be required to complete projects and work assignments outside of normal working hours. The incumbent may be required to travel occasionally, and may be required to work overtime when necessary.

H. Other Information

This position requires the ability to reason logically and creatively; develop and evaluate alternatives, analyze data; effectively communicate ideas and information; and effectively gain and maintain the confidence and cooperation of those contacted during work. The incumbent must exhibit punctuality and dependability in executing the duties of this position. Knowledge and skill in the Systems Development Life Cycle (SDLC) as it applies to information technology, business process re-engineering, and administering and supporting enterprise systems are required. The incumbent must have good customer service skills and work well in a team environment.

	isted above, and I can perform these duties with or without eve reasonable accommodation is necessary, discuss with your
Employee Signature	Date
Printed Name	-
I have discussed the duties of this position wit named above.	th and have provided a copy of this duty statement to the employee
Supervisor Signature	Date
Printed Name	-

Approved: 08/08/2019 EC