

# Stage 1 Business Analysis

California Department of Technology, SIMM 19A.3 (Ver. 3.0.9, 02/01/2022)

### 1.1 General Information

1. Agency or State entity Name: 4265 - Public Health, Department of -

If Agency/State entity is not in the list, enter here with the organization code.

Click or tap here to enter text.

- 2. Proposal Name and Acronym: Emergency Preparedness Office (EPO) Receiving, Staging and Storing (RSS) Warehouse Supply Chain Management Solution (RSS SCM)
- 3. Proposal Description: (Provide a brief description of your proposal in 500 characters or less.)

The CDPH emergency pharmaceutical warehouse is a facility designed to store and distribute temperature-controlled medical supplies and pharmaceuticals during public health emergencies and disasters. This warehouse services as a central location for the emergency response efforts and provides critical medical supplies to healthcare providers and first responders. The current system is insufficient for CDPH emergency operations. Many manual workarounds and a loss of awareness and accuracy within the supply chain is detrimental to the emergency response capabilities of CDPH. This uncertainty creates a risk to operations and a risk to the overall ability of CDPH to respond to emergencies at critical moments .

This project is motivated by the need to maintain continuity of emergency pharmaceutical warehouse operations. Current CDPH warehouse operations share use of the Governor's Office of Emergency Services (Cal OES) Nexgen Asset Management system. Cal OES has determined that Nexgen Asset Management does not meet their business requirements and does not provide a good user experience. In particular, Nexgen Asset Management is prone to supply chain errors and inefficiencies that can result in critical shortages during emergency operations. Cal OES intends to cease use of Nexgen Asset Management at the end of fiscal year 2022-23. Initial security concerns suggest NexGen Asset Management is incompatible with CDPH security policies, lacking, for example, multi-factor authentication. This may exclude the possibility of migrating emergency warehouse operations to a CDPH instance of Nexgen Asset Management and require implementation of a new system.

The purpose of this project is to implement a supply chain management (SCM) solution to support and manage the operations and logistics of CDPH's emergency pharmaceutical warehouse. The SCM solution needs to be capable of providing real-time visibility into inventory levels to optimize

the storage and distribution of critical pharmaceuticals, medical supplies, and equipment in response to natural disasters, epidemics, and other emergency situations. The intent is to optimize SCM processes to enable the accurate tracking and monitoring of the entire supply chain involving multiple stakeholders to increase CDPH's readiness to respond to emergencies. CDPH intends to bring a SCM solution in-house to better customize a comprehensive and integrated solution to improve the coordination with the Office of Emergency Services and local health jurisdictions, which will ultimately preserve the continuity of the provision of emergency services to the people of California.

Proposed Project Execution Start Date: 7/1/2023

4. S1BA Version Number: Version 1

### 1.2 Submittal Information

#### 1. Contact Information

Contact Name: Tracy Langlands

Contact Email: tracy.langlands@cdph.ca.gov

Contact Phone: (916)716-2704

2. Submission Type: New Submission

If withdraw, select Reason: Choose an item.

If Other, specify reason here: Click or tap here to enter text.

Sections Changed, if this is a Submission Update: (List all sections changed.)

Click or tap here to enter text.

Summary of Changes: (Summarize updates made.)

Click or tap here to enter text.

- 3. Attach Project Approval Executive Transmittal to your email submission.
- 4. Attach <u>Stage 1 Project Reportability Assessment</u> to your email submission.

# 1.3 Business Sponsorship

#### 1. Executive Champion (Sponsor)

Title: Chief, Program and Response Branch

Name: Kelly Coleman

Business Program Area: Public Health Emergency Preparedness

#### 2. Business Owner

Title: Chief, Emergency Pharmaceutical and Warehouse Section

Name: Charlotte Girocco

Business Program Area: Public Health Emergency Preparedness

#### 3. Product Owner

Title: Medical Countermeasures Analyst

Name: Joseph Kinard

Business Program Area: Public Health Emergency Preparedness

TIP: Copy and paste or click the + button in the lower right corner on any section to add additional Executive Champions, Business Owners, or Product Owners with their related Business Program Areas as needed.

### 1.4 Stakeholder Assessment

The Stakeholder Assessment is designed to give the project team an overview of communication channels that the state entity needs to manage throughout the project. More stakeholders may result in increased complexity to a project.

1. Indicate which of the following are interested in this proposal and/or the outcome of the project. (Select 'Yes' or 'No' for each.)

State Entity Only: No

Other Departments/State Entities: Yes

Public: No

Federal Entities: Yes

Governor's Office: Yes

Legislature: No

Media: No

Local Entities: Yes

Special Interest Groups: No

Other: No

2. Describe how each group marked 'Yes' will be involved in the planning process.

Other Departments/State Entities: CDPH Information Technology Services Division (ITSD): CDPH Public Health Emergency Preparedness will participate in the planning process as subject matter experts alongside the ITSD Enterprise Portfolio Management Office (ePMO). ePMO will provide

project management support and a designated Project Manager (PM) and Project Director (PD). The designated PM and PD will initiate and complete the Project Approval Lifecycle (PAL) deliverables according to California Department of Technology (CDT) oversight standards through the end of the planning process. The CDPH Information Security Office (ISO) and the CDPH Enterprise Architecture Team will be engaged early for guidance and support in coordination and collaboration with the Public Health Emergency Preparedness, Technical Team, and Subject Matter Experts (SMEs). Designated staff will identify, clarify, and validate technical requirements, receive technical knowledge transfer and/or training, and participate in testing prior to solution implementation. Additionally, ITSD will provides input and support in the areas of IT governance, infrastructure, and application development, and provide consultation and technical guidance regarding all technical aspects of the project. ITSD will help address any technical challenges encountered during the project. The full scope of project participation depends upon solution selection. CDT will be engaged as a collaborative partner to guide CDPH through the PAL process.

\*The following stakeholders do not need to be involved in the planning process, but because EPO works closely with them, *the outcome* of the project needs to be such that it fulfills all the current workflows that occur between them. \*

Other Departments/State Entities: EMSA: Emergency Medical Services Authority (EMSA): EMSA and CDPH both distribute pharmaceutical product across the State of California. EMSA and CDPH will need a new inventory management system that will track real-time inventory availability. In emergency situations, EMSA and CDPH might need to collaborate to send shipments to locations across the State quickly and efficiently. Stakeholder will not be involved in the planning process, however, they may be interested and affected by the outcome of this project

Other Departments/State Entities: CDPH Sexually Transmitted Diseases (STD) Control Branch & CDPH Tuberculosis Control Branch (TBCB): The CDPH STD Control Branch & CDPH TBCB entrusts the CDPH Emergency Pharmaceutical Warehouse with managing their own pharmaceutical product with our Cold Chain Assets. We assist them with the proper storage and distribution of their product throughout the State of California. Any new inventory management solution needs to be set up in a way that tags and tracks their products to ensure proper management, distribution, and reporting. Stakeholder will not be involved in the planning process, however, they may be interested and affected by the outcome of this project

Federal Entities: The Division of the Strategic National Stockpile (DSNS) counts on CDPH to accurately track all shipments of inventory sent from the SNS to the CDPH Emergency Pharmaceutical Warehouse. Any new inventory management solution needs to be able to track the storage, distribution, and reporting of SNS product. Stakeholder will not be involved in the planning process, however, they may be interested and affected by the outcome of this project.

Governor's Office of Emergency Services (Cal OES): Cal OES will be interested in the outcome of this project. In accordance with Public Health Emergency Preparedness grant (PHEP) Capabilities 8/9, Cal OES assists with the storage and distribution of State and Federal medical and pharmaceutical supplies to sites across the state of California. The Governor's Office uses an inventory dashboard maintained by CDPH that serves as official counts of inventory levels across all state agencies and warehouses. This dashboard will be integrated with any inventory management system that is developed. In addition, the development of a more dynamic inventory management system will lead to improved coordination with Cal OES over the long-term. Since the dashboard is

maintained by CDPH, Cal OES is an interested stakeholder but one that will have limited involvement during the planning and execution phase of the project.

Local Entities: Local Public Health entities receive daily reports of CDPH Emergency Pharmaceutical Warehouse inventory. Any inventory management solution needs to provide accurate inventory reporting capabilities. Increased visibility of our inventory available to be requested results in better local community preparedness and response capabilities. Stakeholder will not be involved in the planning process, however, they may be interested and affected by the outcome of this project.

# 1.5 Business Program

- Business Program Name: Emergency Preparedness Office
- 2. Program Background and Context: (Provide a brief overview of the entity's business program(s) current operations.)

The Emergency Preparedness Office (EPO) coordinates overall preparedness and response activities for all public health and medical emergencies, including natural disasters, acts of terrorism, and pandemic disease for the California Department of Public Health. EPO plans and executes the following activities to prepare Californians for public health emergencies:

- Coordinates planning for the Strategic National Stockpile
- Maintains and manages the Medical and Health Coordination Center (MHCC)
- Oversees statewide public health disaster preparedness and response activities
- Distributes and oversees funds to local health departments and health care coalitions for planning
- Operates and maintains the California Health Alert Network (CAHAN)
- Collaborates with partners to develop the Statewide Medical and Health Exercise.

EPO coordinates functions related to Risk Communication and Professional Training; Planning and Response; Policy and Coordination; Program Administration; 24-hour Duty Officer Program; Web and Geographic Information Systems.

The project aims to implement a cutting-edge supply chain management solution to manage the operations and logistics of CDPH's emergency pharmaceutical warehouse. The warehouse stores and distributes critical pharmaceuticals, medical supplies, and equipment in times of natural disasters, epidemics, and other emergency situations. Currently CDPH does not own the system the warehouse uses and utilizes the Cal OES warehouse management system. Cal OES has informed CDPH that they have intention to move on from this system. The current system processes of the warehouse are prone to errors and are not efficient, which could lead to a shortage of critical supplies or responsiveness in times of need.

The purpose of this project is to improve the supply chain management processes of CDPH's emergency pharmaceutical warehouse, making it more efficient, reliable, and effective. By implementing an SCM solution, the warehouse will benefit from real-time visibility of inventory levels, streamlined purchasing and procurement processes, optimized distribution and delivery, and reduced errors and discrepancies. This will ensure that the warehouse can quickly and effectively respond to emergencies and provide critical supplies to those in need. The solution will also provide the warehouse with the ability to track and monitor the entire supply chain, from procurement to delivery, to ensure compliance with regulatory requirements and to mitigate the risk of unauthorized, recalled, and expired products entering the supply chain.

A SCM system will provide a comprehensive and integrated solution to meet the needs of CDPH's emergency pharmaceutical warehouse, enabling it to better protect the health and safety of all Californians. A SCM system managed in-house will improve the coordination with OES and provide preservation and continuity of emergency services to the people of California.

# 3. How will this proposed project impact the product or services supported by the state entity?

The proposed project addresses a critical business continuity risk in the CDPH medical emergency and disaster response operations. This risk results CDPH sharing the Cal OES Nexgen Asset Management system and Cal OES deciding to cease use of that system. A timely migration off of the Nexgen Asset Management system eliminates this business continuity risk, and it eliminates manual processes and other factors that create supply chain management uncertainties during emergency operations.

TIP: Copy and paste or click the + button in the lower right corner to add Business Programs, with background and context and impact descriptions as needed.

# 1.6 Project Justification

#### 1. Strategic Business Alignment

#### **Enterprise Architect**

Title: Senior Enterprise Architect

Name: Craig Stone

Strategic Plan Last Updated? CDPH Strategic Map 2019 - 2022

Strategic Business Goal: Protect the Public's Health

Alignment: Improving the supply chain for emergency pharmaceutical and medical allows CDPH to respond more effectively to public health emergencies and disasters.

Strategic Business Goal: Enhance Services through Agile Operations

Alignment: By possessing dependable, up-to-date data, we can enhance our planning and execution of operations, leading to cost savings for CDPH. Moreover, the new system will

facilitate seamless integration with other advanced technologies, enabling us to provide improved services that better cater to the needs of the people of California.

Enter any content that you want to repeat, including other content controls. You can also insert this control around table rows in order to repeat parts of a table.

TIP: Copy and paste or click the + button in the lower right corner to add Strategic Business Goals and Alignments as needed.

Mandate(s): None

Bill Number/Code, if applicable:

Add the Bill language that includes system-relevant requirements:

TIP: Copy and paste or click the + button in the lower right corner to add Bill Numbers/Codes and relevant language as needed.

#### 2. Business Driver(s)

Financial Benefit: Yes

Increased Revenue: No

Cost Savings: Yes

Cost Avoidance: No

Cost Recovery: Yes

Will the state incur a financial penalty or sanction if this proposal is not implemented? Yes

If the answer to the above question is "Yes," please explain:

Not completing this project may result in a potential loss in grant funding.

The proposed Emergency Pharmaceutical Warehouse could provide financial benefits to the state of California in several ways:

- 1. Improve inventory management by optimizing inventory levels and reduce overstocking or stockouts. This can lead to cost savings by reducing the need for emergency procurement, minimizing inventory holding costs, and preventing expired or wasted products.
- 2. Improved supplier management, allowing the state to manage supplier relationships more efficiently, negotiate better contracts, and ensure timely delivery of products. This can result in cost savings through better pricing, reduced delivery times, and improved quality control.
- 3. Enhanced operational efficiency by streamlining and automating manual processes, such as order management, procurement, and logistics. This can reduce administrative costs, minimize errors, and increase productivity.

- 4. Improved data analysis and decision-making, allowing the state to track and analyze supply chain data in real-time. This can help identify inefficiencies and areas for improvement, allowing for more informed decision-making and cost savings.
- 5. Compliance with federal grant requirements by helping the state meet the grant requirements of the federal government, which can result in continued grant funding and financial benefits for the state.

#### **Improvement**

Better Services to the People of California: Yes

Efficiencies to Program Operations: Yes

Improved Equity, Diversity, and/or Inclusivity: No

Improved Health and/or Human Safety: Yes

Improved Information Security: No

Improved Business Continuity: No

Improved Technology Recovery: No

Technology Refresh: No

Technology End of Life: No

### 1.7 Business Outcomes Desired

#### **Executive Summary of the Business Problem or Opportunity:**

CDPH has relied on the Cal OES Nexgen Asset Management system to support warehouse operations. Cal OES intends to terminate use of that system creating a risk to business continuity. To maintain business continuity means CDPH must either migrate operations to a CDPH instance of Nexgen Asset Management or implement a new supply chain management system.

Nexgen Asset Management has been determined to be an inadequate supply chain management (SCM) solution. It does not meet day-to-day business needs of warehouse operations and has significant limitations during large-scale emergencies. Warehouse emergency operations experience difficulty tracking inventory levels, ensuring the timely distribution of critical medical supplies, and coordinating with healthcare providers, first responders, and other pertinent stakeholders. Unnecessarily higher manual effort is needed to manage and track inventory levels. During emergency operations, this excess manual effort creates limited supply chain visibility and results in three limitations: (1) longer time to deploy equipment and medical supplies to mobilization sites; (2) uncertainty of inventory levels available for rapid deployment; and (3) longer time to deploy equipment and medical supplies from mobilization sites to local health departments, hospitals, healthcare entities, and other stakeholders throughout the State.

Performance monitoring is especially cumbersome with the current system. Key Performance Indicators (KPIs) are not automatically produced by NexGen but instead calculated by rudimentary

data downloads and manipulation. Order processing time, order rejection, inventory accuracy, warehouse and pharmacy room space availability are examples of KPIs that when produced real time would simplify and improve warehouse operations.

An improved SCM solution will automate many processes, reducing the risk of errors and freeing up staff to focus on other critical tasks. This will result in reduced costs, more efficient operations, and improved service levels. In addition, an improved SCM solution will improve cost recovery efforts. The ability to track emergency pharmaceutical warehouse inventory from purchase order receipt through distribution will greatly enhance EPO's ability to document and track Federal reimbursements for product.

Pursuing an enhanced SCM aligns with CDHP's strategic goal of protecting the public's health. A new SCM would protect the public's health through increasing the availability of medical and pharmaceutical supplies to enable rapid deployment throughout the State. A mere 5% in increase of warehouse capacity could result in the additional storage of 4-5 million COVID-19 tests. EPO also intends to focus on increasing the speed of delivery of requested medical supplies and equipment to local health jurisdiction and health care entities by 50% to increase rapid deployments to emergency site.

EPO aligns with the CDPH strategic goal of enhancing services through Agile operations by pursuing a SCM solution that can streamline and automate manual process like order management and logistics; optimize inventory levels; improve supplier management; and improve data management and decision-making in real-time. An enhanced SCM solution could decrease the time needed to deploy emergency staffing, equipment, and supplies to CDPH mobilization sites by 50% (12-24 hours).

The Future of Public Health called for improved emergency preparedness as a key objective that includes early detection, improved timeliness of response, addressing inequities, and sustaining regular public health operations. The timeliness of an enhanced SCM solution provides alignment with Future of Public Health initiatives but more importantly allows CDPH to be ready for the next state emergency. The Covid-19 pandemic has demonstrated that readiness to respond to an emergency is of paramount importance.

#### **Objective ID: 1**

Enhance the CDPH's emergency pharmaceutical warehouse infrastructure of emergency staffing, equipment, and resources. This increases the overall preparedness of the warehouse and ability to respond during emergencies. This objective supports enhancing services through agile operations. The Future of Public Health specifically calls for the improved timeliness of response and ensuring continuity of local emergency preparedness operations as part of its Emergency Preparedness objective, the surge management domain.

**Objective:** Provide better services to Californians by increasing readiness for public health emergencies and disasters with emergency staffing, equipment, and resources for immediate use at CDPH's emergency pharmaceutical warehouse. These essential components are used to receive, palletize, load, and deliver general medical supplies, pharmaceuticals, vaccines, medical countermeasures, or other material being requested by local health jurisdictions in times of emergencies.

**Metric:** Time taken to process resource requests once received.

Baseline: 2.9 days

**Target Result:** Within 12 months of implementation reduce the average order processing time at mobilization sites for small parcel shipments and courier shipments to 2.50 days. Progress will be measured through quarterly reports on order processing times during times of emergency activations.

#### Objective ID: 2

Availability and accuracy of medical countermeasures, vaccines, antibiotics, therapeutics, and other pharmaceuticals and supplies for rapid deployment throughout the state impacts the public health response to an emergency or disaster. Improving the management of this stockpile will improve the timeliness of response and will help sustain regular public health operations. This objective supports the strategy of improving the health and safety of the people of California. The Future of Public Health emergency preparedness objective specifically calls out the need to improve the timeliness of response and sustaining regular public health operations.

**Objective**: Improve the health and safety of the people of California by maintaining accurate inventory records of stockpiled pharmaceuticals and other medical supplies that can be rapidly deployed to any site in the state during a public health emergency or disaster. This will enhance CDPH's ability to handle emergency medical materiel demand. By increasing our inventory accuracy rating by 5%, we could potentially save many lives.

**Metric:** Overall inventory accuracy rating, which measures the percentage of inventory adjustment transactions that are accurately recorded in our system.

Baseline: 92%

**Target Result:** Increase the overall inventory accuracy rating to the 97<sup>th</sup> percentile (a 5% improvement) one year after implementation. This will be achieved by identifying and addressing root causes of inventory discrepancies, implementing more robust inventory control measures, and providing training to staff on proper inventory management procedures. Program will audit inventory records on a quarterly basis and calculate the overall inventory accuracy rating.

#### **Objective ID: 3**

The successful delivery of requested medical supplies and equipment to local health departments, hospitals, and healthcare entities has a direct impact on the provision of emergency services. Improving this delivery provides more effective emergency services and supports the strategic goal of providing better services to the people of California. The Future of Public Health specifically calls for the improved timeliness of response and ensuring continuity of local emergency preparedness operations as part of its Emergency Preparedness objective, the surge management domain.

**Objective:** Provide better services to the People of California by improving the distribution of medical countermeasures, pharmaceuticals, and other medical supplies and equipment to local health departments, hospitals, healthcare entities, and other stakeholders throughout the State.

**Metric:** Order Fill Rate - This metric tracks the percentage of customer orders that are filled correctly and on time within the standard lead time of 48 hours

**Baseline:** 98.27% of customer orders are filled correctly and on time within the standard lead time.

**Target Result:** Increase the order fill rate to 99% within the standard lead time by the end of year one after implementation. The program will perform quarterly audits of order processing reports during times of emergency response activations to track progress..

Enter any content that you want to repeat, including other content controls. You can also insert this control around table rows in order to repeat parts of a table.

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TIP: Copy and paste or click the + button in the lower right corner to add Objectives as needed. Please number for reference.

TIP: Objectives should identify WHAT needs to be achieved or solved. Each objective should identify HOW the problem statement can be solved and must have a target result that is specific, measurable, attainable, realistic, and time-bound. Objective must cover the specific. Metric and Baseline must detail how the objective is measurable. Target Result needs to support the attainable, realistic, and time-bound requirements.

# 1.8 Project Management

#### 1. Project Management Risk Score: 0.3

(Attach a completed <u>Statewide Information Management Manual (SIMM) Section 45 Appendix A Project Management Risk Assessment Template</u> to the email submission.)

#### 2. Project Approval Lifecycle Completion and Project Execution Capacity Assessment

Does the proposal development or project execution anticipate sharing resources (state staff, vendors, consultants, or financial) with other priorities within the Agency/state entity (projects, PALs, or programmatic/technology workload)?

**Answer: Yes** 

Does the Agency/state entity anticipate this proposal will result in the creation of new business processes or changes to existing business processes?

**Answer** (No, New, Existing, or Both): Both New and Existing Processes

# 1.9 Initial Complexity Assessment

1. Business Complexity Score: 1.4

(Attach a completed SIMM Section 45 Appendix C to the email submission.)

2. **Noncompliance Issues:** (Indicate if your current operations include noncompliance issues and provide a narrative explaining how the business process is noncompliant.)

Programmatic regulations: No

HIPAA/CIIS/FTI/PII/PCI: No

Security: No

ADA: No

Other: No

Not Applicable: Yes

Noncompliance Description:

N/A

#### 3. Additional Assessment Criteria

If there is an existing Privacy Threshold Assessment/Privacy Information Assessment, include it as an attachment to your email submission. N/A

How many locations and total users is the project anticipated to affect?

Number of locations: 2 – Depot Park Warehouse, West Sacramento Warehouse

Estimated Number of Transactions/Business Events (per cycle):

- Orders Completed ~1,500 per month
- PO Completed ~1,000 per month
- Transfers ~300 per month

Approximate number of internal end-users: 12

Approximate number of external end-users: Number of external stakeholders from contractors, state agencies, Federal Partners, and Local Entities.

# 1.10 Funding

#### **Planning**

 Does the Agency/state entity anticipate requesting additional resources through a budget action to complete planning through the project approval lifecycle framework? No

If Yes, when will a budget action be submitted to your Agency/DOF for planning dollars?

#### Click or tap to enter a date.

**2.** Please provide the Funding Source(s) and dates funds for planning will be made available:

#### Split funds:

- Emergency Response Federal grant funding
  - o Potential short-term funding for start up depending on cost
- Future of Public Health Initiative (General Fund)
- Public Health Emergency Preparedness Grant (PHEP)
  - o Potential long term fund source for on-going licensing and maintenance cost

#### **Project Implementation Funding**

1. Has the funding source(s) been identified for *project implementation*? Yes

If known, please provide the Funding Source(s) and dates funds for implementation will be made available:

#### Split funds:

- Emergency Response Federal grant funding
  - Potential short-term funding for startup depending on cost
- Future of Public Health Initiative (General Fund)
- Public Health Emergency Preparedness Grant (PHEP)
  - o Potential long term fund source for on-going licensing and maintenance cost

Will a budget action be submitted to your Agency/DOF? No

If "Yes" is selected, specify when this BCP will be submitted: Click or tap here to enter text.

2. Please provide a rough order of magnitude (ROM) estimate as to the total cost of the project: Less than \$10 Million

#### End of agency/state entity document.

Please ensure ADA compliance before submitting this document to CDT.

When ready, submit Stage 1 and all attachments in an email to ProjectOversight@state.ca.gov.

### **Department of Technology Use Only**

Original "New Submission" Date: 07/31/2023

Form Received Date: 07/31/2023

Form Accepted Date: 07/31/2023

Form Status: Complete

Form Status Date: 07/31/2023

Form Disposition: Approved

If Other, specify: Click or tap here to enter text.

Form Disposition Date: 07/31/2023

Department of Technology Project Number (0000-000): 4265-088