

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION
WATER SYSTEM IMPROVEMENT PROGRAM
CONSTRUCTION MANAGEMENT PROCEDURES**

**SECTION: WSIP CONSTRUCTION
MANAGEMENT**

APPROVED:

**PROCEDURE NO.: 025
TITLE: EMERGENCY RESPONSE**

DATE: 02/24/2011

REVISION NO.: 3

1.0 Policy

The Emergency Response CM Procedure shall be implemented for occurrence of emergency events. Emergency events can include natural disasters, fires, accidents, medical emergencies or negative impacts to public health, safety and environment.

This CM Procedure applies to all personnel working on the Water System Improvement Program (WSIP) to the extent that their work is affected by these WSIP Construction Management Procedures and does not conflict with specific San Francisco Public Utilities Commission (SFPUC) Policies.

2.0 Description

The Emergency Response Plan identifies responsible parties, response and coordinated action guidance requirements between SFPUC, WSIP Construction Management personnel and Contractors. The principle representatives are the designated SFPUC management, Project Construction Manager (CM) and the Contractor's Site Safety Representative.

The Contractor is fully and totally responsible for all construction site safety.

- 2.1 The WSIP Construction Incident Classification and Notification Chart are presented on Attachment 025 – 1.
- 2.2 The Contractor shall prepare the Site-Specific Contractor Health and Safety Plan; refer to Attachment 025 – 2.
- 2.3 The Project CM is responsible for the preparation of the Project CM Safety Plan; refer to Attachment 025 – 3.
- 2.4 The Emergency Response (ER) Coordination Matrix guideline is presented on Attachment 025 – 4.

3.0 **Definitions**

3.1 **Site-Specific Contractor Health and Safety Plan**

The Contractor is required to submit to the Project CM a copy of the Contractor's final Site-Specific Health and Safety Plan (HASP) certified by the Contractor's qualified safety professional and Project Manager as required by WSIP CM Procedure No. 025. The submittal format and detail requirements shall be in accordance with Contract Document Technical Specification No. 00814, Health and Safety.

3.1.1 The Emergency Response Plan is a subsection of the HASP.

3.1.2 The Contractor HASP preparation, review and approval flow chart is presented on Attachment 025 – 3.

3.2 **CM Safety Plan**

The Project CM is required to submit to the Regional Project Manager a copy of the final Project Construction Management Safety Plan. This Plan will address safety of the project CM team (e.g. CM employees and sub-consultants) during the conduct of their activities.

3.2.1 The CM (City personnel or Consultant) Safety Plan preparation, review and approval flow chart is presented on Attachment 025 – 2.

3.3 **SFPUC Site-Specific Emergency Action and Operations Action Plan**

3.3.1 **Existing SFPUC Facility**

If the project work site is located at an existing manned SFPUC facility, then the Contractor's and Project CM Consultant's Health and Safety Plans must reference and coordinate with the requirements of SFPUC Site-Specific Emergency Action and Operations Action Plan.

3.3.2 **Remote Work Site**

If the project work site is located in a remote area, the Project CM with assistance from SFPUC Health & Safety Group and/or CMB Safety Coordinator shall prepare a site specific Emergency Response guidance document for SFPUC personnel. The guidance document will be reviewed by the Regional Safety Manager for consistency with other Emergency Response Plans.

3.4 **Incident**

An Incident is defined as any unplanned or unexpected event that results in personal injury, property damage, or environmental release. Incidents are classified as **Serious** or **Non-Serious** in accordance with the guidelines shown on Attachment 025 – 1, Construction Incident Classification and Notification Chart.

3.5 Personal Protective Equipment (PPE)

The Contractor shall define task specific PPE requirements and provide these PPE for all personnel in compliance with all applicable laws, rules and regulations. PPE minimum requirements shall be in accordance with Article 14.0 of Contract Technical Specification No. 00814 and Cal-OSHA requirements.

3.6 Emergency Equipment

The Contractor shall provide the required emergency and first aid equipment to be utilized for the project. Emergency equipment minimum requirements shall be in accordance with Article 15.0 of Contract Technical Specification No. 00814.

4.0 Responsibilities

4.1 Project Construction Manager (CM)

The Project Construction Manager manages the project construction contract; supervises and directs the performance of the project CM team and ensures conformance to established policies and procedures for the management of the project.

4.2 Regional Safety Manager (RSM)

The Regional Safety Manager performs oversight of the Contractor's and CM Consultant's compliance with contract terms relating to safety as set forth in the WSIP Safety Approach. The RSM maintains safety compliance records and assists in the investigation of safety incidents. The Regional Safety Manager reports to the Program Safety Manager.

4.3 Contractor

The Contractor is fully and totally responsible for all construction site safety.

4.3.1 The Contractor is the business entity awarded the contract to perform the work to successful completion and meet the terms and conditions of the contract. The Contractor is responsible to prepare and submit Site-Specific Contractor Health and Safety Plan (HASP). The Site Specific Representative represents the Contractor on project Safety issues.

4.4 Site Safety Representative (SSR)

The Site Safety Representative is the full-time Contractor's representative assigned for project Safety issues and their contractual requirements. The SSR coordinates the contractor's emergency response activities with the Project CM.

- 4.4.1 The SSR qualifications, role and responsibilities shall be in accordance with Contract Technical Specification No. 00814.
- 4.4.2 The SSR shall notify and coordinate site emergency response issues for site security with the Contractor Site Security Monitor in accordance with WSIP CM Procedure No. 038, Site Security.

5.0 Implementation

The Emergency Response Coordination Matrix is presented on Attachment 025 – 4.

5.1 Types of Emergencies

- 5.1.1 During the construction activities, health and safety incidents or other emergencies may occur. Incidents are classified as either **Serious** or **Non-Serious** in accordance with the guidelines on Attachment 025 – 1.
- 5.1.2 In the event of a **Serious Incident**, the CM/Contractor is required to notify the SFPUC Incident Notification Contact and the SFPUC Emergency Coordinator listed on Attachment 025 – 1.
- 5.1.3 In the event of a **Non-Serious Incident**, the CM/Contractor is required to notify the SFPUC Incident Notification Contact listed on Attachment 025-1.
- 5.1.4 These emergency responses may require personnel to evacuate the work site or shelter in place per applicable safety plan and/or instructions from the Project CM, refer to examples set forth in Attachment 025 – 1 and Emergency Medical Services / First Aid Guidelines Cal-OSHA 1512.

5.2 Emergency Response Plan

The project specific Emergency Response Plan should contain, as a minimum, the guidelines set forth by Technical Specification No. 0814, and Cal-OSHA, Title 8 Section 3220 (Emergency Action Plan) and 3221 (Fire Prevention Plan) and provide the following information;

- 5.2.1 Identification and Responsibilities of Emergency Coordinator: provide names and responsibilities of Emergency Coordinator and Alternate Emergency Coordinator. The Project Construction Manager (CM) has the overall responsibility as the job site Emergency Coordinator who coordinates action with and receives support from the Site Safety Representative (SSR).
- 5.2.2 Contractor Responsibilities.
- 5.2.3 Employee Responsibilities.

- 5.2.4 Pre-Emergency Contacts with Emergency Providers; Emergency Coordinator is responsible for contacting local Fire Fighting authority, Police, Emergency Medical Team (ETM), Regional Environmental Manager or others depending on the nature of the emergency event.
- 5.2.5 On-site Emergency Response Equipment; availability and location of equipment and tools for emergency response and names responsible for maintenance of equipment.
- 5.2.6 Emergency Response Procedure; escape, critical plant operations, rescue/medical duties, reporting procedures, and alarm system procedures.
- 5.2.7 Employee Training and Documentation; Employee training and documentation as required per Cal-OSHA 3220(e).

5.3 Emergency Response Coordination and Action

- 5.3.1 The Project CM (if a consultant position) prepares the CM Consultant's Health and Safety Plan consistent with SFPUC Site-Specific Emergency Action and Operations Plan.
- 5.3.2 The Site Safety Representative prepares the Contractor's Health and Safety Plan (HASP).
- 5.3.3 All SFPUC project personnel assigned to the project team shall follow the SFPUC Facility Emergency Action Plan.
- 5.3.4 If the project work site is located at a remote work area, then the responsible CMB Manager will determine the organizational –chain-of-command for emergency response. Unless notified otherwise and relieved by senior management, the senior SFPUC employee is the designated SFPUC on-site Emergency Coordinator, refer to Attachment 025-4.
- 5.3.5 When work site emergency response is required, the Project CM shall assume the role of Emergency Coordinator with support from the SSR and responsible SFPUC Emergency Coordinator Representative, refer to Attachment 025-4.

6.0 Other Procedural Requirements

CM Procedure No. 012 Safety Reporting Procedures

7.0 References

7.1 Technical Specifications

- No. 00814 Health and Safety (WSIP PLA Projects between \$5 and \$30 Million Version)
- No. 00814 Health and Safety (WSIP PLA Projects over \$30 Million Version).
- No. 00814 Health and Safety (WSIP Non-PLA Projects under \$5 Million Version).

7.2 CM Procedures

- No. 038 Site Security

7.3 Others

- WSIP Construction Management (CM) Plan, Section 2.2.2, Safety Regional Water System, Emergency Response and Recovery System, November 2006
- U.S. Department of Labor, Occupational Safety & Health Administration, 29 CFR 1910.38(a): Emergency Action Plan
- Cal-OSHA Construction Safety Orders 1512 (First Aid)
- Cal-OSHA Construction Safety Orders 3220 (Emergency Action)
- Cal-OSHA Construction Safety Orders 3221 (Fire Prevention)

8.0 Attachments

- 025 – 1 WSIP Construction Incident Classification and Notification Chart
- 025 – 2 Site-Specific CM Safety Plan Preparation Flow Chart
- 025 – 3 Site-Specific Contractor’s Health and Safety Plan/Emergency Response Plan Preparation Flow Chart
- 025 - 4 Emergency Response Coordination Matrix
- 025 – 5 Revision Control Log

**Attachment 25-1
Construction Incident Classification and Notification**

**WSIP CONSTRUCTION
HEALTH & SAFETY
INCIDENT**

**NON-SERIOUS INCIDENT
SFPUC NOTIFICATION REQUIRED**

- Minor injury or illness
- Hazardous substance exposure
- Property damage
- Fire (extinguisher)
- Minor spill, release, potential violation or exceeding of permit
- A “near miss”



**PCSM/SFPUC NOTIFICATION
(In Order of Contact)**

Only One Listed Person Needs Contact

Todd Bjornsen- AECOM Program Const. Safety Mgr.
O: (415) 554-3446, C: (516) 537-2631
TBjornsen@swater.org

Alan Wong – SFPUC CMB Safety
O: (415) 554-0711, C: (415) 706-4419
AWong@swater.org

Carolyn Jones – SFPUC Mgr Health & Safety- Primary
O: (415) 550-3577, C: (415) 819-6157
CJones@swater.org

Steve Brooks – SFPUC Alt. Contact
O: (415) 550-3581, C: (415) 218-8850
SBrooks@swater.org

Laura O’Heir – SFPUC Alt. Contact
O: (415) 550-3579, C: (415) 572-5715
LOheir@swater.org

John Kinneen- AECOM Program Construction Mgr.
O: (415) 554-3472, C: (646) 321-7922
JKinneen@swater.org

**SERIOUS INCIDENT
EMERGENCY NOTIFICATION REQUIRED**

- Death, life threatening injury or illness
- Hospitalization >24 hrs.
- Loss of bodily member or permanent disfigurement
- Kidnap/missing person
- Acts or threats of terrorism
- Event that involves fire, explosion or property damage that requires a site evacuation or estimated to result in >\$500,000
- Spill or release of hazardous materials or substances that involves a significant threat or imminent harm to workers or public



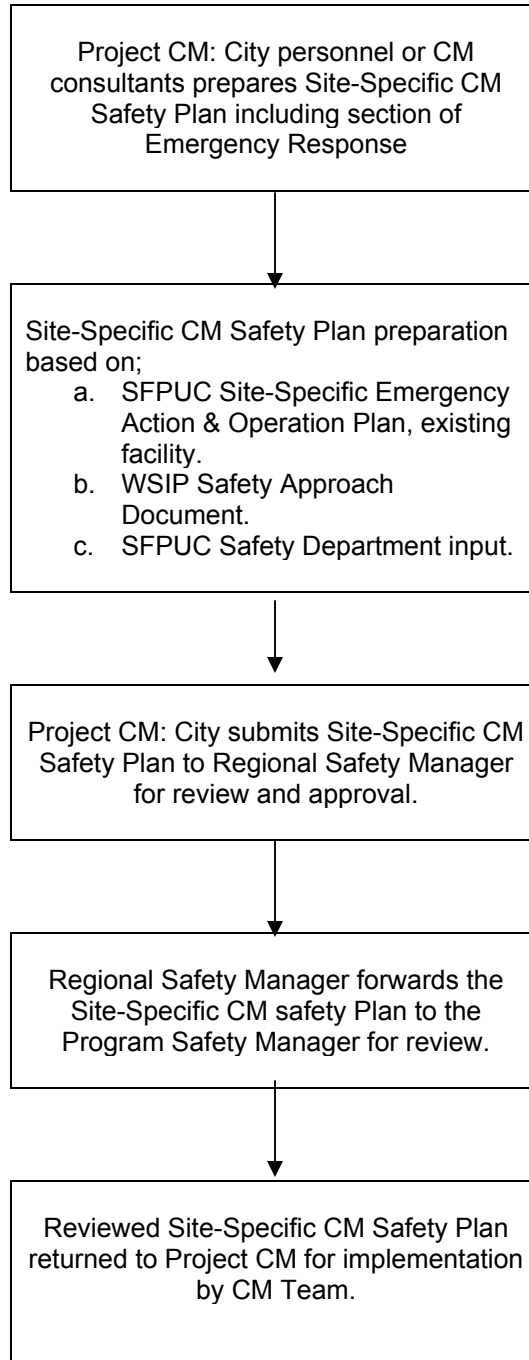
SFPUC EMERGENCY COORDINATION

**John Rodgers
Emergency Planning Coordinator
415-554-2458
415-819-0881 (M)
jrogers@swater.org**

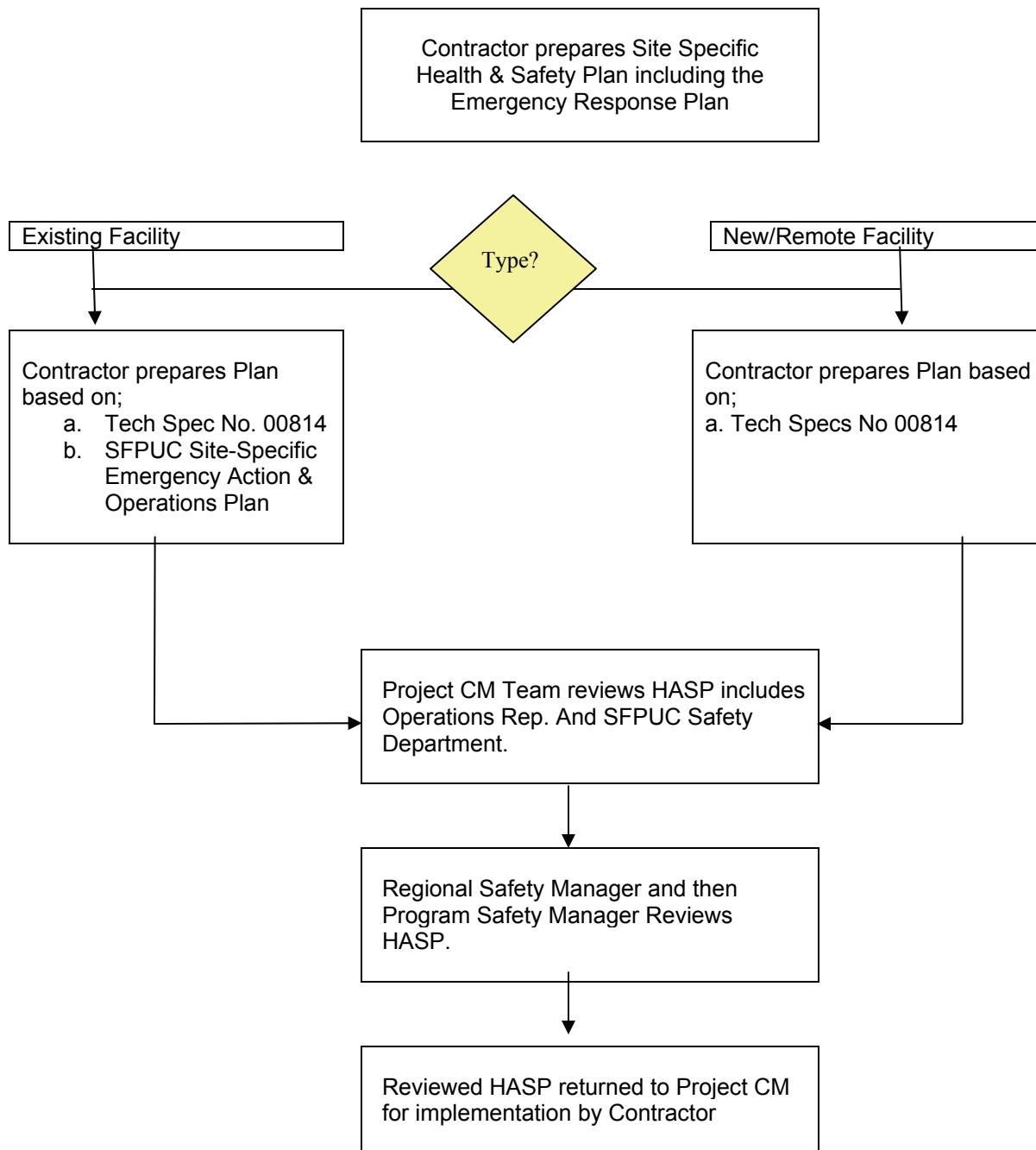
OR

**John Ehrlich
Security
415-554-2457 (O)
415-307-2694 (M)
JEhrlich@swater.org**

Attachment 025 – 2
Site-Specific CM Safety Plan Preparation Flow Chart



Attachment 025 – 3
**Site-Specific Contractor's Health and Safety Plan/
Emergency Response Plan Preparation Flow Chart**



**Attachment 025 - 4
EMERGENCY RESPONSE (ER) COORDINATION MATRIX**

	EXISTING SFPUC FACILITY JOB SITE		NEW /REMOTE SFPUC FACILITY LOCATION JOB SITE	
Safety Lead Reports to Project CM	Project CM (Consultant)	Project CM (SFPUC)	Project CM (Consultant)	Project CM (SFPUC)
Site Safety Representative (SSR) for Contractor	Coordinates with Project CM for ER issues	Coordinates with Project CM for ER issues	Coordinates with Project CM for ER issues	Coordinates with Project CM for ER issues
Project CM Team – Consultant Personnel	Coordinates with Project CM for ER issues	Coordinates with Project CM for ER issues	Coordinates with Project CM for ER issues	Coordinates with Project CM for ER issues
Project CM Team – SFPUC Personnel	Coordinates with Project CM, but reports to designated CMB Manager or senior SFPUC personnel on site for ER	Coordinates with Project CM for ER issues	Coordinates with Project CM for ER issues	Coordinates with Project CM for ER issues

**Attachment 025 – 5
Revision Control Log**

Revision No.	Revision Date	What changed?
Rev 3	February 24, 2011	<ul style="list-style-type: none"> • Revised Attachment 1; WSIP Construction Incident and Notification Chart; <i>Section: SFPUC Emergency Coordination</i>; Tony Para replaced by John Ehrlich, 415-554-2457 and email address jehrich@sfgwater.org
Rev 2	December 11, 2009	<ul style="list-style-type: none"> • Revised Attachment 1; WSIP Construction Incident and Notification Chart; <i>Section: SFPUC Emergency Coordination</i>; Greg Suhr replaced by Tony Parra, 415-307-2694 and email address tparra@sfgwater.org
Rev 1	September 18, 2009	<ul style="list-style-type: none"> • Revised Section 3.4; Incident • Revised Section 5.1; Types of Emergencies • Revised Section 5.2; Emergency Response Plan • Revised Section 5.3; Emergency Response Coordination and Action Plan • Revised Section 7.0; added Sections 7.1, 7.2, & 7.3 • Added new Attachment 1; WSIP Construction Incident and Notification Chart • Moved Rev 0 Attachment 1 to; Rev 1 Attachment 4; Emergency Response Coordination Matrix • Added new Attachment 5; Revision Control Log
Rev 0	March 16, 2009	Signed