


**SAN FRANCISCO PUBLIC UTILITIES COMMISSION
INFRASTRUCTURE CONSTRUCTION
MANAGEMENT PROCEDURES**

**SECTION: SFPUC INFRASTRUCTURE
CONSTRUCTION MANAGEMENT**

APPROVED: 

PROCEDURE NO: 034

DATE: 6/7/2019

**TITLE: SAFETY REPORTING
PROCEDURES**

REVISION: 1

1.0 Policy

All parties involved in the construction phase of the SFPUC Infrastructure projects are required to comply with the SFPUC Infrastructure CM contract safety requirements, the California Code of Regulations, Title 8 (Cal/OSHA) and all applicable Federal, State and Local regulatory standards.

The SFPUC Infrastructure CM Safety Approach and Contract Technical Specification Section 00 73 19, Health and Safety shall be uniformly and consistently applied to all SFPUC Infrastructure Projects.

The Construction Contractor will have full and total responsibility for the construction means, methods, techniques and all construction site safety on the project.

This SFPUC Infrastructure CM Procedure applies to all personnel working on SFPUC Infrastructure projects during construction to the extent that their work is affected by this CM Procedure and does not conflict with SFPUC policies or the Contract under which the Work is executed.

2.0 Description

This SFPUC Infrastructure Procedure establishes the requirements for monitoring the Contractors' and CM teams' compliance with the SFPUC Infrastructure CM safety requirements, regulatory standards and the reporting of safety incidents and results.

3.0 Definitions

3.1 Activity Hazard Analysis (AHA)/Job Hazard Analysis (JHA)

A form used to identify the task and break it down into steps, identify the hazards associated with each step, and identify the control measures used for each step to protect the worker, environment and/or public. This form is also commonly referred to as Job Safety Analysis (JSA); refer to Attachment 034–2.

3.2 California Code of Regulations, Title 8 (Cal/OSHA)

3.2.1 The California Department of Industrial Relations, Division of Occupational Safety and Health, California Occupational Safety and Health Administration (Cal/OSHA) enforces California Occupational and Public Safety Laws and provides information and consultative assistance to employers, workers, and the public regarding workplace safety and health issues.

3.2.2 California Code of Regulations, Title 8 (Cal/OSHA) describes the safety and reporting requirements for work in California. Complete information and reporting requirements are provided on their website. However, subjects of greater interest are the following listed regulations;

- Chapter 3.2 California Occupational Safety and Health Regulations
- Chapter 4 Division of Industrial Safety
- Chapter 7 Division of Labor Statistics and Research; Subchapter 1, Occupational Injury or Illness Reports and Records

3.3 Contractor Management Information System (CMIS)

The CMIS is an on-line management tool for the processing of contract documents based on established SFPUC Infrastructure CM Business Processes. It serves as a tool for effective storage and retrieval of various documents generated during a construction project.

3.3.1 The Contractor submits the Safety reports and documents into the CMIS.

3.4 Health and Safety Plan (HASP)

A project Site-Specific Health and Safety Plan developed by the Contractor and submitted to the RE for approval in accordance with Contract Technical Specification Section 00 73 19, Health and Safety.

3.4.1 A Typical Table of Contents for the Health and Safety Plan is presented in Attachment 034–4.

3.5 Incident

Any unplanned or unexpected event that results in personal injury, property damage, or environmental release.

3.6 Near-Miss Incident

Any unplanned or unexpected event that could have resulted in personal injury, property damage or environmental release, but did not result in an incident due to unplanned circumstances.

3.7 Project Monthly Safety Report

A report submitted to the Program Safety Manager which is compiled by the RE from statistical data provided by the Contractor and supplemented by data from the CM team of hours worked by the Contractor and CM team, OSHA Recordable Incidents and Incident Rate, Lost Work Day cases and Incident Rate, Lost Work Days and Days Away from Work Rate, First Aid Cases and Property Damage Incidents.

3.7.1 The SFPUC Infrastructure Program Safety Manager will compile safety information from all project Contractors and CM teams and then produce a Monthly Program Safety Report for SFPUC Infrastructure Management.

4.0 Responsibilities

4.1 Contractor

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

4.1.1 The Contractor produces and submits a HASP, AHA's/JHA's, documented safety inspections, project monthly safety statistics, training records, incident reports and other safety reports, plans and certifications as required by Federal, State and local regulations.

4.1.2 The Contractor shall provide a site safety orientation for each employee, regulatory required site safety meetings, and trained safety personnel for daily inspections of all work on the site.

4.2 Resident Engineer (RE)

The RE ensures that all documentation and reporting for safety is submitted by the Contractor as required by Contract Technical Specification Section 00 73 19, Health and Safety.

4.2.1 The RE will produce and submit to the Construction Manager a SFPUC Infrastructure Project CM Safety Plan for the CM team and will ensure that all CM team members comply with the SFPUC Infrastructure Project CM Safety Plan and applicable regulations.

- 4.2.2 The RE will submit the Contractor's and the CM's Project Monthly Safety Statistical Report and Incident Reports to the Construction Safety Manager (CSM), Senior Project Manager (SPM), and Construction Manager for review.
- 4.2.3 The RE will provide support to the Contractor and the CSM during investigations of all project safety incidents.
- 4.2.4 The RE is responsible for the SFPUC internal and external distribution of Incident Reports to others in compliance with Contract Technical Specification Section 00 73 19, Health and Safety.

4.3 Construction Safety Manager (CSM)

The CSM;

- (a) Monitors the compliance of the Contractor and the CM teams with the SFPUC Infrastructure CM Safety Approach document and Contract requirements;
- (b) Assists with analysis and investigation of safety incidents;
- (c) Provides an overview of the SFPUC Infrastructure CM Safety Approach document requirements at Pre-Bid and Pre-Construction Conferences and provides orientation to each RE and CM team;
- (d) Conducts and documents a Pre-Construction Safety Review Meeting with the CM team and the Contractor to review the requirements for HASPs and Hazard Assessment observations;
- (e) Summarizes and provides Program-wide Analysis to SFPUC Infrastructure CM Management of safety statistics and reports provided by the RE to the SPM and Construction Manager.
- (f) Maintains records of safety compliance and effectiveness; and
- (g) Assists in the investigation of safety incidents.

5.0 Implementation

5.1 Safety Approach Implementation

- 5.1.1 The PM/RE and PE will ensure safety and health requirements are included in the Contract Documents, including the identification of pre-existing, site specific safety hazards in accordance with Contract Technical Specification Section 00 73 19, Health and Safety.
- 5.1.2 The CSM will provide an overview of the Safety Approach and requirements at the Pre-Bid Conference and at the Pre-Construction Conference.

- 5.1.3 Prior to any work beginning on the project site, the CSM will provide the CM team and Contractor's supervisory staff with project specific orientation training, including safety approach requirements, specification information, safety documentation requirements, AHA/JHA/Incident reporting requirements, and an overview of Cal/OSHA Compliance requirements.
- 5.1.4 The Contractor will prepare and submit to the RE all required Safety Plans, AHA's/JHA's, and Hazard Assessments in accordance with the Contract Documents.
- 5.1.5 The RE will prepare and submit to the CSM a Project CM Safety Plan that addresses the Safety requirements for the CM team that complies with the SFPUC Infrastructure CM Safety Approach document and all responsibilities of the RE for safety oversight.
- 5.1.6 During construction, the Contractor will conduct Safety Tailgate Meetings per CAL/OSHA regulatory requirements and other Safety and Health Meetings and training relevant to the specific types of work at the project site for all employees and staff.
- 5.1.7 The RE will advise and take actions as necessary to correct any observed project safety hazards that pose danger to life or health and document and notify the CSM of any such actions.
- 5.1.8 The RE will maintain and enforce the Contractor's requirements for incident notification and contract safety submittals.

5.2 Incident Reporting

- 5.2.1 Any employee of the Contractor or member of the CM team involved in or witnessing a Near-Miss Incident or a Safety Incident must report it to their Supervisor immediately.
- 5.2.2 The Contractor must immediately notify the RE and, within 24 hours, investigate and submit an Incident Investigation Report (Attachment 034-1) to the RE within 48 hours of the event. A copy of Incident Investigation Reports involving SFPUC employees will be provided to the SPM and the CMB Manager.
- 5.2.3 The Contractor shall complete and submit to the RE a root cause analysis of the Incident or Near-miss Incident within ten (10) working days of the event.
- 5.2.4 Any member of the CM team may stop the Contractor's work if a safety hazard is observed that poses an immediate danger to life or health. The RE will notify the PM, Construction Manager and CSM and document the incident within 24 hours for submission and review to the PM, Construction Manager, CSM and Contractor.

5.3 Safety Reporting

- 5.3.1 The Contractor shall maintain project safety audits, reports, records and logs on the project site for review by the RE or CSM.

- 5.3.2 The Contractor shall submit Project Monthly Safety Statistical Reports to the RE.
- 5.3.3 The RE will incorporate monthly safety statistics of the CM team with the Contractor's safety statistics and submit a Project Monthly Safety Report on the Contractor safety performance of the overall project to the CSM.
- 5.3.4 The CSM will compile the data from all Project Monthly Safety Reports and provide the PM with a Monthly Report of safety statistics and significant Incidents and Contractor safety performance for the facility and an overall program-wide report to SFPUC Infrastructure Management.

5.4 Agency Visits

All contacts with Cal/OSHA or other compliance agencies concerning any SFPUC Infrastructure Program Project shall be reported IMMEDIATELY to the concerned CM and PM, as well as, the CSM.

"Contacts" include all Cal/OSHA discussions, meetings, visits, phone calls, e-mails, notifications, correspondence, etc. pertaining to SFPUC Infrastructure Program Projects.

5.5 Site Visitors

Visitors to the project site must sign-in at the City Offices. Depending on the nature of the visit, visitors will receive a safety orientation (covering the current potential site hazards) from the Lead Inspector or Resident Engineer prior to being granted site access.

This orientation will include but not limited to the following information:

- Project information and description
- Medical/Fire Emergency contacts and phone numbers
- Emergency and Non-Emergency facilities locations and phone numbers
- Safety Assembly locations
- Other important information specific to each project.

No visitors will be permitted into the project unescorted. Visitors must comply with all project safety requirements, including personal protective equipment (PPE).

6.0 Other Procedural Requirements

CM Procedure No. 033 Emergency Response

CM Procedure No. 035 Site Security

7.0 References

7.1 Technical Specifications

Section 00 73 19 Health and Safety Requirements

7.2 SFPUC Infrastructure CM Procedures

No. 033 Emergency Response

7.3 Others

California Code of Regulations, Title 8 (Cal/OSHA)

SFPUC Infrastructure Construction Management Plan

SFPUC Infrastructure CM Safety Approach Document

8.0 Attachments

034 - 1 Incident Investigation Report

034 - 2 Activity Hazard Analysis (AHA)/Job Analysis (JHA) – Typical

034 - 3 Project Monthly Safety Report – Typical

034 - 4 Contractor Health and Safety Plan (HASP), Table of Contents – Typical

034 – 5 Revision Control Log

Attachment 034 - 1
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Incident Investigation Report – Form

SFPUC SUPERVISOR'S ACCIDENT INVESTIGATION REPORT				
DIVISION/BUREAU	WORK GROUP	OSHA Case No. if recordable (from Form 5020)		
Where did accident occur? (i.e., 750 Phelps, or Automotive Shop Bay 2)	Date of Accident	TIME AM PM	Date Reported	
PERSONAL INJURY		PROPERTY DAMAGE		
Injured Employee's Name	Age	Property Damaged		
Job Class, Title	Time in Position			
Type of Injury (i.e., sprain, or cut)	Part of Body Injured	Type of Damage		
Object/Equipment/Substance That Caused Injury		Object/Equipment/Substance That Caused Damage		
Date & Time <i>DWC Form 1</i> Provided to Employee				
DESCRIPTION	Describe Clearly How the Accident Occurred: (Attach Motor Vehicle Accident Report for All Motor Vehicle Accidents)			
ANALYSIS	What Acts, Failures to Act, or Conditions Contributed Most Directly to This Accident?			
	What are the Basic or Fundamental Reasons for the Existence of these Acts or Conditions?			
	FUTURE ACCIDENT CLASSIFICATION <input type="checkbox"/> Major <input type="checkbox"/> Serious <input type="checkbox"/> Minor	LIKELIHOOD OF ACCIDENT RECURRENCE <input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low		
PREVENTION	What Actions Will Be Taken To Prevent Reoccurrence?			

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Activity Hazard Analysis (AHA) /Job Analysis (JHA) – Typical

INSTRUCTIONS FOR COMPLETING A CODE OF SAFE PRACTICE

DEPARTMENT/DIVISION: Enter the department/bureau name for which this CSP will apply.

WORK GROUP: Enter the work group name for which this CSP will apply.

DATE PREPARED: Enter the date this CSP was prepared or updated.

TASK: Describe the task that will be performed.

HAZARDS: Place a check in all the boxes that apply to hazards encountered while performing this task.

DESCRIBE: List any additional detail that is needed to identify the hazards present while performing this task.

PERSONAL PROTECTIVE EQUIPMENT and OTHER SAFETY EQUIPMENT:

Place a check in all the boxes that apply to the PPE and all other Safety Equipment necessary to protect employees while performing this task.

SPECIFY STEPS TO COMPLETE TASK and RELATED CONTROLS:

List the steps to complete the task this CSP covers and include the ways employee will be protected from injury. The information should be clear and detailed, such that employees will know the specific safety requirements.

Attachment 034 - 2

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Activity Hazard Analysis (AHA) /Job Analysis (JHA) – Typical

CODE OF SAFE PRACTICES

Division:	Department:
Prepared By:	Date:
Title:	
Location and Crew:	
Task:	
Approved By and Date:	

Hazards:

Describe:

<input type="checkbox"/> Chemicals <input type="checkbox"/> Confined Space <input type="checkbox"/> Cumulative Trauma <input type="checkbox"/> Electrical <input type="checkbox"/> Fire <input type="checkbox"/> Heat Stress <input type="checkbox"/> High Pressure <input type="checkbox"/> High Work/Falls	<input type="checkbox"/> Hot Work <input type="checkbox"/> Infectious Materials <input type="checkbox"/> Lifting <input type="checkbox"/> Materials Handling <input type="checkbox"/> Moving Machinery <input type="checkbox"/> Noise <input type="checkbox"/> Slips <input type="checkbox"/> Other	
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Personal Protective and Other Safety Equipment:

Eyes: <input type="checkbox"/> Chemical Goggles <input type="checkbox"/> Safety Glasses <input type="checkbox"/> Face Shield and Goggles <input type="checkbox"/> Other – Describe:	Body: <input type="checkbox"/> Gloves <input type="checkbox"/> Work Shoes/Rubber Boots <input type="checkbox"/> Coveralls <input type="checkbox"/> Hard Hat	Respiratory Protection: <input type="checkbox"/> Half-Face Air Purifying Respirator with Appropriate Cartridge <input type="checkbox"/> Self Contained Breathing Apparatus <input type="checkbox"/> Emergency Escape Respirator <input type="checkbox"/> Dust/Mist Mask
Hearing: <input type="checkbox"/> Ear Plugs <input type="checkbox"/> Ear Muffs <input type="checkbox"/> Other – Describe:	Ventilation: <input type="checkbox"/> Exhaust Fan <input type="checkbox"/> Blower Fan <input type="checkbox"/> Other – Describe:	Fall Protection: <input type="checkbox"/> Safety Harness and Lanyard <input type="checkbox"/> Self-Retracting Lifeline (SRL) <input type="checkbox"/> Portable Anchor Type:

Air Monitoring Equipment: <input type="checkbox"/> Four Gas Meter How Many? _____ <input type="checkbox"/> Five Gas Meter How Many? _____ <input type="checkbox"/> Other – Describe:	Confined Space Retrieval: <input type="checkbox"/> Tripod or UCL <input type="checkbox"/> SRL/Winch Combination Unit <input type="checkbox"/> Safety Harness <input type="checkbox"/> Ladder
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Specific Procedures:

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Attachment 034 - 3 Project Monthly Safety Report – Typical

Project Number: <enter project number here xx-xxxx>

Project Title: <enter project title here>

	Recordable Cases		Recordable Rates		Days Away Work Cases		Days Away Work Rate		Total Project Man-hours	
	<u>MTD</u>	<u>YTD</u>	<u>MTD</u>	<u>YTD</u>	<u>MTD</u>	<u>YTD</u>	<u>MTD</u>	<u>YTD</u>	<u>MTD</u>	<u>YTD</u>
Contractor:	0	0	N/A	N/A	0	0	N/A	N/A	0	
Construction Staff:	0	0	N/A	N/A	0	0	N/A	N/A	0	
Subcontractors:	0	0	N/A	N/A	0	0	N/A	N/A	0	
Total:	0	0	N/A	N/A	0	0	N/A	N/A	0	0

Additional Project safety reporting Information:

	<u>MTD</u>	<u>YTD</u>
First Aid Cases:	0	0
Near-miss Reports:	0	0
OSHA Citations:	0	0
Property Damage Incidents:	0	0

Definitions

- Recordable Cases - all incidents requiring medical attention**
1. beyond first aid
 - Recordable Rate -**
 2. **Number of cases x 200,000/man-hours**

Attachment 034 - 4

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Contractor Health and Safety Plan (HASP) Table of Contents – Typical

NOTE:

A typical HASP is provided to assist the Contractor in developing a Site-Specific Health and Safety Plan for a project. *This information is for guidance only* and is not intended to be utilized as the Contractor's sole source for development of a Project HASP, *refer to additional notes below.*

Section 1 Introduction

- 1.1 Project Background
- 1.2 Project Objectives

Section 2 Scope of Work

- 2.1 Scope of Work
- 2.2 Health and Safety Plan Application
- 2.3 Emergency Response

Section 3 Contractor Organization Roles, Responsibilities and Coordination

- 3.1 Key Contractor Personnel
 - 3.1.1 Construction manager
 - 3.1.2 Construction Superintendent
 - 3.1.3 Site Safety representative
 - 3.1.4 Emergency Response Coordinator
- 3.2 Key Project Construction Management Personnel
 - 3.2.1 Project Construction Manager
 - 3.2.2 Program Safety Manager

Section 4 HASP Plans and Guidelines

- 4.1 Site Risk Analysis
- 4.2 Safety Systems Analysis
- 4.3 Specific Activity Hazard Analysis (AHA)
- 4.4 Hazards Communication
- 4.5 Site Audits/Inspections
- 4.6 Discipline and Enforcement
- 4.7 Critical Lift Plans

Attachment 034 - 4

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Contractor Health and Safety Plan (HASP) Table of Contents – Typical

Section 5 HASP Procedures, Training, and Orientation

- 5.1 Contractor Weekly Safety Meeting Requirements
- 5.2 Contractor Workers Daily Task Safety Planning
- 5.3 HASP Procedures
- 5.4 Job Task/Safety Analysis Training
- 5.5 Special Training Programs
 - 5.5.1 Hazardous Materials
 - 5.5.2 Hazardous Waste
 - 5.5.3 Confined Space/Underground Work
 - 5.5.4 Trenching and Shoring
 - 5.5.5 Crane Inspection/Heavy Lifts
 - 5.5.6 Fall protection
 - 5.5.7 work in Operating Treatment Plants
- 5.6 OSHA 10/30 – Hour Outreach Program
- 5.7 Training Documentation and Record Keeping

Section 6 Emergency Management Planning/Injury Reporting

- 6.1 Emergency Response
- 6.2 Emergency management Coordination
- 6.3 Injury Reporting
- 6.4 Incident Investigation/Root Cause Analysis
- 6.5 First Aid/Competent Persons
- 6.6 Medical Treatment Locations

Section 7 Record Keeping, Reporting, Posting, and Communications

- 7.1 Record Keeping Requirements
- 7.2 Reporting Requirements
- 7.3 Posting Requirements
- 7.4 Communication Requirements

Contractor Health and Safety Plan (HASP) Table of Contents – Typical

Section 8 Health and Safety Requirements

- 8.1 Health and Safety Requirements and Applicability
- 8.2 OSHA Requirements
- 8.3 Cal/OSHA Requirements
- 8.4 Project Specific Requirements
 - 8.4.1 Lockout/Tagout Process
 - 8.4.2 Facility Site-Specific Safety Procedure

Section 9 Medical Qualification, Surveillance, and Protection

- 9.1 Medical Qualifications and Surveillance
- 9.2 Personal Protective Equipment (PPE)
- 9.3 Hearing Conservation
- 9.4 Respirator Protection
- 9.5 Controlled Substances and Smoking
- 9.6 Other Contractor Site-Specific Safety, *as required*

Section 10 Security Requirements

- 10.1 Site Security

References (partial listings)

- OSHA 1910 General Industry Standards
- OSHA 1926 Construction Standards
- Owner Site and Industrial Security Requirements
- Contract Technical Specification 00 73 19, Health and Safety
- Contract Technical Specification 00 73 63, Site Security

NOTES:

- (a) The Contractor is reminded to develop the Site-Specific Safety Requirements in coordination with the owner's facility site specific safety procedures. (if applicable with OSHA and Health and Safety regulations and policies.
- (b) The Contractor should amend the HASP as required in support of any additional Health and Safety requirements or changes in condition that mandate changes/modifications to the project Site-Specific HASP.

**Attachment 034 - 5
Revision Control Log**

Revision No.	Revision Date	What changed?
Rev 1	6/7/19	<ul style="list-style-type: none">• Minor format changes;• Attachments revised;• Revision Control Log updated.
Rev 0	11/14/16	Signed