

## PORT CODE PROCEDURE

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**NO. PCP-0011**

**DATE** : January 1, 2007  
**SUBJECT** : Construction Site Safety  
**TITLE** : Tower Crane Site Safety Plan

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**PURPOSE** : The purpose of this Port Code Procedure is to detail procedures regarding tower crane safety which comply with the intent of Port Building Code Section 1704.19.

Implementation of the intent of the code requires that a contractor identify the location of proposed crane operations on a Crane Site Safety Plan and agree to comply with tower crane safety regulations; to require the presence of a safety representative during tower crane erection, jumping, and dismantling and to prohibit these operations during typical rush hours; and to require employment of a flag-person to redirect traffic when loads are lifted over public streets and walkways during typical rush hours.

**REFERENCE** : 2016 Port of San Francisco Building Code Section 1704.19.  
Title 8, Occupational Safety and Health Regulations (CAL/OSHA), Tower Cranes re: Requirements for erection, dismantling, operation, tests/examination of equipment and accessory gear.

**DISCUSSION** : Following a tower crane collapse in November 1989, the State of California passed legislation regulating certain tower crane operations. The San Francisco Board of Supervisors approved an ordinance based on that state legislation, adding a section regarding tower crane safety requirements to the San Francisco Building Code (SFBC).

Crane safety remains under the jurisdiction of Cal/OSHA, which requires an inspection certification prior to and following erection of a tower crane. While the PSF has no authority over, and its employees have no expertise in, the regulation of cranes; the following forms and procedures are developed to administer a level of safety within the Port of San Francisco equal to that of the City's Department of Building Inspection requirements.

**DEFINITIONS** : For the purposes of this Port Code Procedure, the following definitions apply:

1. **Contractor** is the building contractor licensed by the State of California responsible for tower crane site safety for the project.
2. **Tower crane** is a crane in which a boom, swinging jib, or other structural member is mounted on a vertical mast or tower, and includes the following subcategories as defined by Cal/OSHA General Industry Safety Orders, Article 91, 4885(U)(1-4):

- a. **Tower crane (climber)** is a crane erected upon and supported by a building or other structure which may be raised or lowered to different floors or levels of the building or structure.
- b. **Tower crane (free standing)** is a crane with a horizontally swinging boom which may be on a fixed base or mounted on rails.
- c. **Tower crane (mobile)** is a tower crane which is mounted on a crawler, truck or similar carrier for travel or transit.
- d. **Tower crane (self-erector)** is a mobile tower crane that is truck- carrier mounted and capable of self-erection.

3. **Jumping a crane** is the process of increasing the height of a tower crane by raising the cab and inserting a modular section beneath it.

**GENERAL REQUIREMENTS:**

A Crane Site Safety Plan is to be submitted the Port of San Francisco Engineering Division's Building Permit Group (BPG) prior to issuance of a building permit for the superstructure for any high-rise building site on which a tower crane will be used.

**PROCEDURE :**

Any new construction permit application submitted for a high-rise construction project shall have a notation made by the plan reviewer regarding the requirements for submittal of a Crane Site Safety Plan. When the contractor confirms that a tower crane will be used, the following procedure is to be followed:

1. The contractor shall provide to the BPG a completed *Crane Site Safety Plan Submittal Form and Crane Safety Compliance Agreement* (Attachment A).
2. The contractor shall indicate on a plan attached to the submittal form the use and location of tower cranes by circling the applicable areas on the plan and by numbering the circled areas according to the corresponding location listed on the form.

Note: A site plan showing what streets will be impacted by the moving, erection, and operation of the tower crane is required by PSF Engineering Encroachment Division in order to obtain a street use permit for crane erection. That site plan can be used as the crane site safety plan by adding the necessary additional information.

3. The contractor shall submit to the BPG two copies of the Crane Site Safety Plan with a Submittal Form and Safety Compliance Agreement attached to each plan.
4. The PSF plan reviewer will review the submittals to determine if all documents comprising the Crane Site Safety Plan are complete and if the Submittal Forms and Safety Compliance Agreements are signed by a California licensed contractor. Incomplete or unsigned documents shall be not be accepted.

5. The PSF shall stamp as "approved" both copies of a properly submitted Crane Site Safety Plan and shall provide one copy to the contractor, which shall be posted by the contractor at the job site.
6. The plan reviewer shall attach these documents to the approved construction documents for inclusion in the permanent project record.
7. The contractor shall submit to the BPG a copy of a tower crane inspection certificate issued by a Cal/OSHA approved inspection agency following erection of the tower crane and prior to its use. This may be done by mail or in person. This submittal must indicate the permit application or permit number for the project.
8. BPG shall include the Cal/OSHA Crane Inspection Certificate as part of the approved construction documents.
9. All documents submitted to BPG related to Crane Site Safety shall be included and retained as part of the approved permit documents.

Eunejune Kim  
Chief Harbor Engineer  
Port of San Francisco

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Date

Originally approved by the Port Commission on 01/01/2008  
Update reviewed and approved by Neil Friedman, Chief Building Inspector 10-26-2016

**Attachment: Crane Site Safety Plan Submittal Form and Crane Safety Compliance Agreement.**

**CRANE SITE SAFETY PLAN SUBMITTAL FORM  
& CRANE SAFETY COMPLIANCE AGREEMENT**  
[Attach form to each copy of plans submitted]

Date \_\_\_\_\_

Site: \_\_\_\_\_ Permit Application No: \_\_\_\_\_

Name of Applicant \_\_\_\_\_ Phone\_\_\_\_\_

A. Attached are two (2) copies of a Crane Site Safety Plan which includes the required information, circled and marked with applicable numbers on the Plan:

1. Location of tower crane on the construction site
2. Location of tower crane in adjoining streets
3. Location of crane-related designated loading areas
4. Location of crane-related designated storage areas
5. Tower crane foundation design and details (may be submitted on separate sheet)

B. Copy of Cal/OSHA permit for the erection and operation of a crane is attached, and if required, a copy of California crane operator(s) license(s).

C. Crane is to be used for:  Steel erection  Concrete placement  
 Other: \_\_\_\_\_

D. I will comply with all of the following requirements:

1. Applicable CAL/OSHA safety requirements.
2. Crane manufacturer safety requirements.
3. Safety representative: I will not allow installing, increasing the height ("jumping"), or dismantling of a crane without a safety representative of the crane manufacturer, distributor, or a representative of a licensed crane certifier being present on site for consultation during all such procedures.
4. Prohibited hours: I will not allow installing, increasing the height ("jumping"), or dismantling of a crane during the weekday hours (excluding holidays) of 7:00 a.m. to 9:00 a.m. or between the hours of 4:00 p.m. and 6:00 p.m.
5. Flag person: I will assure that no crane will lift a load over roadways or pedestrian walkways during the hours of 7:00 a.m. through 9:00 a.m. and during the hours of 4:30 p.m. through 7:00 p.m. without a flag person directing the flow of pedestrian and automobile traffic away from the area where the load is being lifted.

E. I will submit a copy of the crane inspection certificate to PSF - BPG after erection of the crane and prior to its use.

\_\_\_\_\_  
Contractor responsible for Crane Site Safety

\_\_\_\_\_  
CA Contractor License No.

Received by: \_\_\_\_\_

Date \_\_\_\_\_

\_\_\_\_\_  
BPG Plan Reviewer