DIVISION OF OCCUPATIONAL SAFETY AND HEALTH POLICY AND PROCEDURES MANUAL

TOWER CRANE ERECTION AND OPERATING PERMITS

C-41A

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AUTHORITY: California Labor Code Sections 7370 through 7384 and Title 8, California Code of Regulations, Sections 341.1 and 344.70 through 344.75.

POLICY: It is the policy of the Division of Occupational Safety and Health to ensure that the erection, climbing, dismantling and operation of all tower cranes proceed safely by: (1) issuing permits for the erection or operation of tower cranes; (2) ensuring that crane employers are aware of all applicable Title 8 Safety Orders and the crane manufacturer's recommended practices prior to the erection and operation of a tower crane; (3) requiring that crane employer notify the Division when a fixed tower crane will begin operation, be climbed or be dismantled and when a mobile tower crane will be operated at different sites; and (5) conducting programmed inspections of workplaces which contain tower cranes.

PROCEDURES:

A. PERMITS

1. Types of Tower Cranes For Which Permits Are Required

An Erection and/or Operating Permit is required for construction-type fixed tower cranes and mobile tower cranes, including free-standing and climber tower cranes as defined in 8 CCR 4885. Typically, construction-type fixed tower cranes are those tower cranes that are designed to be erected on a site, in a specified sequence or lifts, operated for a period of time and then dismantled and taken to another site to be erected there.

EXCEPTION: Industrial-type tower cranes of the portal, whirley, and hammerhead varieties are not subject to tower crane erection and operating permit requirements. See Figures 5, 6, 7 and 11 in 8 CCR 4885.

2. Activities For Which Permits are Required

a. Erection Permit

A Tower Crane Erection Permit is required prior to the erection of a fixed tower crane structure in excess of 36 feet in height. See Labor Code Section 6500 and 8 CCR Section 341.1.

b. Operation Permit

A Tower Crane Operating Permit is required prior to operating a fixed or mobile tower crane and after the tower crane is erected and certified as ready for operation by a Division-licensed Crane Certifier. See Labor Code §7373 and 8 CCR §334.70.

- 3. Types of Permits for Fixed Tower Cranes
- a. Erection Permit
- (1) An Erection Permit is required for the erection, climbing and dismantling of a fixed tower crane structure.
- (2) If different employers are engaged in these activities for the same crane, e.g., one employer is performing the erection and another is performing the climbing, then separate erection permits shall be obtained by each employer.
- b. Operating Permit
- (1) An Operating Permit is required for the actual operation of a tower crane at a worksite.
- (2) A fixed tower crane is deemed "ready for operation" when the crane has been erected and certified as ready for operation by a Division-licensed Crane Certifier.
- 4. Types of Permits for Mobile Tower Cranes
- a. Erection Permit

An Erection Permit is not required for mobile tower cranes.

- b. Operating Permit
- (1) An Operating Permit is required for the operation of a mobile tower crane.

EXCEPTION: An Operating Permit is not required for the operation of a crawler or carrier-mounted conventional crane fitted with a tower attachment. See 8 CCR Section 4885, Plate I., Figure 15.

- (2) A mobile tower crane is deemed "ready for operation" when the crane has been erected and certified as ready for operation by a Division-licensed Crane Certifier.
- 5. Annual Tower Crane Permits

No Annual Permits for the erection and operation of tower cranes shall be issued.

B. APPLICATION

- 1. Who Must Obtain a Tower Crane Permit
- a. Erection Permit

The employer actually engaged in the erection, climbing and dismantling of a fixed tower crane structure shall apply for and obtain an Erection Permit, e.g., a general or prime contractor, the tower crane erector or the crane employer. See Attachment C.

NOTE: Crane employer means an employer who is responsible for the maintenance and operation of a tower crane.

b. Operating Permit

The employer actually engaged in operating the fixed or mobile tower crane must apply for and obtain an Operating Permit. See Attachment D.

- 2. Application Filing Procedures
- Fixed Tower Cranes

An applicant for an Erection or Operating Permit for a fixed tower crane shall file a completed application together with the applicable fees at a Regional Office nearest the location where the fixed tower crane will be operated.

NOTE: When filing an application at a Regional Office is not convenient, an application may also be filed at a District Office nearest the location where the fixed tower crane will be operated.

b. Mobile Tower Cranes

An applicant for an Operating Permit for a mobile tower crane shall file a completed application together with applicable fees at a Regional Office nearest the location where the mobile tower crane will be operated or the District Office nearest the principal office of the applicant.

NOTE: When filing an application at a Regional Office is not convenient, an application may also be filed at a District Office nearest the location where the mobile tower crane will be operated or a District Office nearest the applicant's principal office.

c. Regional Notification by District Office

After receipt of an application for an Erection or Operating Permit for a fixed tower crane or an Operating Permit for a mobile tower crane, the District Manager shall immediately contact the Regional Senior Safety Engineer or Regional Manager by telephone to notify them of the receipt of a tower crane application, and shall then immediately forward the application to the Regional Senior Safety Engineer for processing.

3. Application Requirements

An applicant for a fixed or mobile tower crane erection or operating permit shall be given under penalty of perjury by the applicant or by a person duly authorized in writing to act on the behalf of the applicant with respect to matters referenced in the application, and shall contain the following items:

- a. Applicant's name, address, telephone number, project safety contact person, employer's representative at the site, including title and telephone number and applicant's Contractor's License Number.
- b. Designation of type of contractor and description of crane being operated.
- c. Location and telephone number of crane jobsite including nearest cross street, city and county.
- d. Number of employees and anticipated starting date.
- e. Designation of existence of high voltage lines.
- f. Certification that applicant possesses knowledge of the applicable occupational safety and health standards and manufacturer's operating

instructions for the subject crane, as well as a statement of the applicants related training, education and/or experience within the last five years.

- g. Certification that the applicant will comply with all applicable standards and other lawful orders of the Division, and, that the conditions, practices, means, methods, operations or processes used or proposed to be used will be safe and healthful and that the permit to operate will be posted at the site of operation.
- h. A statement of all previous business identities of the applicant within ten (10) years prior of the date of the application.

NOTE: Business identities include, but are not limited to, fictitious business names, corporate names, and/or joint venture partnerships and any other business affiliations in the construction industry involving the use of cranes. See Attachment I.

- i. A certification issued by a Division-licensed Crane Certifier for subject crane.
- j. A written job plan which describes the intended operation of the subject crane including specific uses of the crane and the nature and weight of anticipated loads. See Attachment B.

k. In the case of a fixed tower crane, an applicant shall provide certification that a Division-licensed Crane Certifier or surveyor, or safety representative for the distributor or manufacturer, will be present during climbing and dismantling operations to assure that such processes and operations are performed in accordance with the manufacturer's recommendations and any applicable Title 8 Safety Orders.

- l. Written statement of each crane operator's experience and qualification to operate the type of tower crane utilized.
- 4. Application Processing and Permit Issuance
- a. Regional Senior Engineer Responsibilities

The Regional Senior Engineer shall be responsible for reviewing, processing, approving and issuing all Erection and Operating Permit applications, collecting applicable fees and conducting all safety permit conferences.

NOTE: The Regional Manager may designate other Cal/OSHA engineers to assist the Regional Senior Cal/OSHA Engineer in processing and issuing tower crane permits. However, only those Cal/OSHA engineers who have received

specialized training in tower crane operations and inspection procedures shall be designated by the Regional Manager to review, process, approve and issue tower crane permits and to conduct safety permit conferences.

b. Changes in Application or Permit Conditions

- (1) When notified of changes in the application or Permit conditions, the Regional Senior Cal/OSHA Engineer shall determine whether a Safety Permit Conference is needed to assess the impact of the change on the safety of the erection and/or operation of the tower crane.
- (2) If the change is one which does not affect the safety of the erection or operation of the tower crane, or if the change is determined to be an acceptable modification to the application or Permit conditions, documentation of the change shall be filed with the permit application.

NOTE: No additional fee shall be imposed for application changes.

c. Ten Day Issuance for Operating Permits

Operating Permits for fixed and mobile tower cranes shall be issued by the Regional Senior Cal/OSHA Engineer within 10 business days of the receipt of a completed application. See Attachments E and F.

- 5. Tower Crane Safety Permit Conference
- a. The Division shall conduct a Safety Permit Conference with the Applicant prior to erection or operation of the tower crane to ensure that all parties involved with the erection and operation of the tower crane are aware of the requirements and responsibilities under a tower crane erection and operating permit, all applicable Title 8 Safety Orders, and the manufacturer's recommended practices. See Attachment B.

EXCEPTION: Applicants who have demonstrated a high degree of safety competence in previous activities involving tower crane erection and operating activities may be exempted by the Regional Senior Cal/OSHA Engineer from participation in a Safety Permit Conference.

b. At the Safety Permit Conference, the Division shall require the presence of the following individuals involved with the erection and/or operation of the tower crane: applicant, general or prime contractor, appropriate subcontractor(s), crane erector, crane employer, business representatives or agents of employees affected by the operations under the Erection or

Operating Permit and, on public works projects, representatives of the governmental entity overseeing the project.

- c. During the course of a Safety Permit Conference, the following items shall be evaluated:
- (1) The Applicant's previous history of safety and health violations, including those violations under other business identities during the previous ten-year period.

NOTE: For out-of-state contractors, the Division shall obtain information concerning the applicant's national citation history.

- (2) The potential risks of the operation, including those addressed in the crane operating manual, as well as specific measures to be taken by the Applicant to minimize these risks.
- (3) The applicant's Injury and Illness Prevention Program, Code of Safe Practices, Safety Instructions For Employees, General Safety Precautions and Emergency Medical Services.
- (4) The applicant's written job plan covering those items set forth in Attachment B.
- (5) The applicable Title 8 Safety Orders relating to tower cranes.
- 6. Permit Fees
- a. Erection Permit

The fee for issuance of an Erection Permit, including the climbing and dismantling of the tower crane structure, is \$350.

- b. Operating Permit
- (1) The fee for issuance of an Operating Permit for either a fixed or mobile tower crane is \$200.
- (2) In addition to the \$200 fee for the issuance of an Operating Permit, an hourly fee of \$75 per hour per Cal/OSHA engineer present on-site shall be charged for each inspection conducted in conjunction with tower crane permit application and monitoring activities.

NOTE ONE: Only time spent conducting the actual inspection, including travel time, shall be billed. Inspection time does not include research, development or non-inspection related activity. Travel time shall be based on the roundtrip time of the Cal/OSHA engineer from their district office to the tower crane's location.

NOTE TWO: A minimum number of two (2) Cal/OSHA engineers and a maximum number of three (3) Cal/OSHA engineers shall be present during the inspection of a fixed tower crane. However, even if three (3) Cal/OSHA engineers are present during the inspection, maximum hourly inspection fee shall be based on no more than two (2) Cal/OSHA engineers present on-site during the inspection.

- c. "Temporary" Operating Permit
- (1) An Operating Permit may be issued by the Regional Senior Cal/OSHA Engineer, or other Cal/OSHA engineer designated by the Regional Manager, upon completion of the initial operating permit inspection pending payment of the applicable permit fees.
- (2) A copy of the Operating Permit shall be completed and given to the crane employer which shall serve as an invoice.
- (3) All inspection fees are due within 30 business days of the date of issuance of a Temporary Operating Permit.
- (4) A Temporary Operating Permit is valid for 30 days or until the inspection fees are paid.
- Permit Validity
- a. Erection and Operating Permit for Fixed Tower Crane

Erection and Operating Permits for fixed tower cranes are valid for the length of time the crane is operated at the worksite. If the crane is relocated to a new site on the same project, new Erection and Operating Permits are required.

b. Operating Permit for Mobile Tower Crane

An Operating Permit for a mobile tower crane shall be valid for one calendar year.

C. TOWER CRANE PERMIT HOLDER DUTIES

1. Presence of a Crane Certifier or Surveyor Or Safety Representative of the Distributor/Manufacturer During Climbing and Dismantling

In the case of a fixed tower crane, the Tower Crane Permit Holder shall ensure that a Division-licensed Crane Certifier or surveyor, or safety representative for the distributor or manufacturer is present during climbing and dismantling operations to assure that such processes and operations are performed in accordance with manufacturer recommendations and applicable Title 8 Safety Orders.

NOTE: The presence of a safety representative of the tower crane distributor or manufacturer during climbing and dismantling is highly recommended by the Division.

2. Notifications

a. In the case of a fixed tower crane, the Tower Crane Erection or Operating Permit Holder shall notify the Regional Office which issued the permit in writing or by telephone followed by written notification twenty-four (24) hours in advance of the following events:

- (1) When the tower crane will commence operation;
- (2) When the tower crane will be climbed; and
- (3) When the tower crane will be dismantled.

b. In the case of a mobile tower crane, the Tower Crane Operating Permit Holder shall notify the Regional Office which issued the permit in writing or by telephone followed by written notification twenty-four (24) hours in advance of the time and location of each new site of mobile tower crane operation.

EXCEPTION: When the mobile tower crane will be operated at any one site, or multiple sites, for less than one day, notification is not required.

NOTE: Permit Holders may provide written notification by completing a Notification of Tower Crane Activity Change (see Attachment H) or may use their own form.

D. INSPECTION OF PERMITTED ACTIVITIES

NOTE: For all tower crane erection and operating permit inspections, compliance personnel shall complete a Cal/OSHA 1 for data entry into IMIS. Unless the inspection is initiated in response to a complaint or accident, the erection and operating permit inspections shall be categorized as programmed inspections. The Cal/OSHA 1 shall be data entered in the district office where the tower crane is located.

1. Operating Permit Application Inspection

The Division shall inspect all fixed and mobile tower cranes within ten business days of receiving a completed application for an Operating Permit.

NOTE: The inspection requirement does not apply to an application for an Erection Permit.

2. Semi-Annual Tower Crane Inspections

a. The Regional Senior Cal/OSHA Engineer, or other designated Cal/OSHA engineer, shall inspect each tower crane within the Region, including free-standing, climbing, mobile and self-erecting tower cranes, twice each year.

NOTE: The Regional Manager may designate other Cal/OSHA engineers to assist the Regional Senior Cal/OSHA Engineer in conducting tower crane inspections. However, only those Cal/OSHA engineers who have received specialized training in tower crane operations and inspection procedures shall be designated by the Regional Manager to conduct tower crane inspections.

- b. The initial inspection shall be performed following the erection of the tower crane prior to any work being performed by the crane.
- c. The second inspection may be conducted at any other time during the six months following the initial inspection as determined by the Regional Senior Cal/OSHA Engineer and may be conducted up to sixty days beyond the six months period if a tower crane will remain in operation.
- d. The semi-annual tower crane inspection shall include at a minimum those items referenced in the Tower Crane Inspection Check List and applicable manufacturer's recommendations. See Attachment A.

3. Tower Crane Deficiencies

a. If the Regional Senior Cal/OSHA Engineer discovers any deficiencies affecting the safe operation of a crane during the course of a required

inspection, a Notice of Tower Crane Deficiencies shall be given to the crane employer. See Attachment G.

b. Deficiencies which directly affect the safe operation of the crane shall be corrected prior to the operation of the crane. Items not directly affecting the safe operation of the crane shall be corrected in a time frame agreed upon by the crane employer and the Regional Senior Cal/OSHA Engineer.

NOTE: Any deficiencies noted during the course of an inspection shall be discussed with the Crane Certifier who certified the crane.

c. The crane employer and/or the crane owner shall provide written verification of abatement of the deficiencies noted in the Notice of Tower Crane Deficiencies.

NOTE: A follow-up inspection may also be made by the Regional Senior Cal/OSHA Engineer, or other designated Cal/OSHA engineer, to ensure that the deficiencies listed on the Notice of Tower Crane Deficiencies have been corrected. Fees for the inspection will be based on an hourly fee of \$75 per hour per Cal/OSHA engineer present on-site to a maximum of two (2) Cal/OSHA engineers.

4. Monitoring of Erection, Climbing and Dismantling Operations

The Regional Senior Cal/OSHA Engineer shall be responsible for evaluating crane erection, climbing and dismantling operations to determine whether the Regional Senior Cal/OSHA Engineer or designated Cal/OSHA engineers need to be present at the site during these operations.

NOTE: No fee shall be charged for time spent in monitoring crane erection, climbing or dismantling operations, unless as part of the required semi-annual inspections.

- 5. Violative Conditions Observed During Course of Tower Crane Inspections
- a. Imminent Hazard

If the Regional Senior Cal/OSHA Engineer, or other designated Cal/OSHA engineer, observes an imminent hazard during the course of a tower crane inspection, compliance personnel shall issue an Order Prohibiting Use. See P&P C-8.

b. Violative Conditions Affecting Safe Operation of the Tower Crane or Involving A Tower Crane Erection and/or Operating Permit

If the Regional Senior Cal/OSHA Engineer, or other designated Cal/OSHA engineer, observes a violative condition which is related to the safe operation of a tower crane, or involves a tower crane Erection and/or Operating Permit, during the course of a tower crane inspection, the Regional Senior Cal/OSHA Engineer, or other designated Cal/OSHA engineer shall include the violative condition in the Notice of Tower Crane Deficiencies. See Attachment G.

NOTE ONE: If the violative condition referenced in the Notice of Tower Crane Deficiencies is not corrected within the period fixed for abatement in the Notice, a citation shall be issued. When a citation is issued based on a violative condition discovered during the performance of a tower crane inspection, no inspection fee shall be assessed.

NOTE TWO: If the violative conditions involve a Division-licensed crane certifier or surveyor, compliance personnel shall make a referral to the Crane Unit.

Violative Conditions Not Affecting Safe Operation of the Crane

If the Regional Senior Cal/OSHA Engineer, or other designated Cal/OSHA engineer, observes a violative condition which is not related to the safe operation of the tower crane, or involves a tower crane Erection and/or Operating Permit, the Regional Senior Cal/OSHA Engineer, or other designated Cal/OSHA engineer, shall make a referral to the appropriate District Office. See P&P C-90.

- d. Penalty and Abatement for Permit-Related Violations
- (1) A minimum civil penalty of \$250 shall be assessed for permit related violations.
- (2) The abatement period fixed for permit related violations shall be limited to no longer than two working days and the filing of an appeal with the Appeals Board will not stay the abatement period.
- (3) Any crane employer who fails to abate the violative conditions shall be subject to additional penalties for failure to abate.
- 6. Refusal of Entry

If the Regional Senior Cal/OSHA Engineer, or other designated Cal/OSHA engineers, are refused entry to a worksite to conduct a required tower crane inspection, the Regional Senior Cal/OSHA Engineer shall determine if an inspection warrant is needed. If the determination is made that an inspection warrant is required, a warrant shall be obtained. See P&P C-25.

7. Safety Procedures When Inspecting a Fixed Tower Crane

a. General Hazards

The hazards associated with the inspection of a fixed tower crane include musculoskeletal injuries; falls; lockout/tagout dangers; overhead suspended loads; construction vehicle operation and electrical hazards.

b. Electrical Hazards

- (1) Under no circumstances shall compliance personnel inspecting a fixed tower crane attempt to perform any tests on the electrical components of the tower crane. If a question arises during an inspection relating to electrical equipment, such as hoist or slew motors, electrical disconnect, slip ring assembly or any other electrical appliance associated with the fixed tower crane, compliance personnel shall contact the crane owner for assistance.
- (2) During the time that compliance personnel are either walking a lower jib chord catwalk, tied-off by a body harness and lanyard, or exiting a trolley basket on the jib, compliance personnel shall direct the crane operator to lockout the electrical power to the crane.
- c. Coordination with Tower Crane Employer
- (1) When compliance personnel make arrangements with a fixed tower crane employer to conduct an inspection, compliance personnel shall advise the crane employer that it is the responsibility of the crane employer to provide a man basket meeting the requirements of 8 CCR §5004 for the use of compliance personnel during the tower crane inspection.

NOTE: If a crane employer refuses to provide a man basket, compliance personnel shall inform the employer that an Operating Permit cannot be issued unless an inspection can be conducted safely.

(2) Compliance personnel shall not climb individual tower crane sections, exit the ladder cage, and tie-off to individual tower crane section lacings when

inspecting tower crane section bolts, washers, welds and paint, but shall perform all such inspection work from a man basket.

EXCEPTION: The Regional Senior Cal/OSHA Engineer may determine that the design of the particular tower crane's tower sections will permit inspection of section bolts, washers, welds and paint without the use of a man basket.

d. Personal Protective Equipment

- (1) Compliance personnel conducting an inspection of a fixed tower crane shall wear an approved body harness and lanyard at all times.
- (2) When a basket-equipped trolley is provided, compliance personnel shall tie-off to that basket at all times during jib inspection. In those cases where a catwalk is provided on the lower chord members of the jib, the crane employer shall provide an appropriately rigged 3/8-inch wire rope extending the full length of the jib to which compliance personnel shall secure their approved lanyard including a positive snap to prevent rollout.

e. Communication

- (1) Compliance personnel shall utilize appropriate radios to communicate with each other during the inspection.
- (2) Prior to the inspection of the tower portion of the tower crane, compliance personnel should give the crane operator one of the radios and maintain the other in the suspended man basket.
- (3) Compliance personnel shall ensure that the crane operator is thoroughly familiar with the inspection procedures and has a clear understanding of signals to be used between compliance personnel and the crane operator.
- (4) During the remainder of the inspection, radios may be used as appropriate between compliance personnel and the crane operator.

E. DENIAL, SUSPENSION OR REVOCATION OF TOWER CRANE PERMITS

- 1. Denial
- a. Denial Conditions

After the application process and the gathering of relevant information has been completed, a Tower Crane Erection and/or Operating Permit shall be denied if the Permit Applicant:

- (1) Fails to comply with the provisions of the Permit Application process;
- (2) Fails to produce information at the Safety Permit Conference which is essential to a determination of whether a Tower Crane Permit should be issued; or
- (3) Has a previous citation history which indicates gross negligence, gross incompetence or willful or repeated disregard of any occupational safety standard or order involving tower cranes.

NOTE: An Permit may be denied under conditions (1) through (3) above, but only after notice and an opportunity to be heard is given to the Permit Applicant. P&P C-23 requires Permit revocation or suspension actions to be referred to the Legal Unit for evaluation and for a determination of whether the Legal Unit's involvement in presenting the Division's case at a revocation or suspension hearing is necessary.

b. Denial Hearing Procedures

- (1) If the Regional Senior Cal/OSHA Engineer determines that an Applicant's Erection and/or Operating Permit should be denied, then approval to deny the Permit shall be obtained from the Deputy Chief for Cal/OSHA Enforcement, through the Regional Manager. Approval to deny shall be granted or denied by the Deputy Chief within 24 hours.
- (2) If the denial is approved by the Deputy Chief, the Regional Manager shall follow the Denial Hearing Procedures found in P&P C-41, pp. 18-23.
- 2. Suspension or Revocation
- a. Revocation or Suspension Conditions

A Tower Crane Erection and/or Operating Permit shall be suspended or revoked if the Permit Holder:

(1) Engages in gross negligence, gross incompetence or willful or repeated disregard of any occupational safety standard or order involving tower cranes;

- (2) Fails to notify the Division twenty-four (24) hours in advance of the erection, climbing or dismantling of a fixed tower crane;
- (3) Fails to ensure that a Division-licensed Crane Certifier or surveyor or safety representative for the distributor or manufacturer, was present during climbing or dismantling operations;
- (4) Has a record of violations of Title 8 Safety Orders which indicates that the crane employer may not be maintaining a safe worksite or operation; or
- (5) The crane employer refused the Division entry to a worksite which contains a permitted activity.

NOTE: An Permit may be denied under conditions (1) through (5) above, but only after notice and an opportunity to be heard is given to the Permit Holder. P&P C-23 requires Permit revocation or suspension actions to be referred to the Legal Unit for evaluation and for a determination of whether the Legal Unit's involvement in presenting the Division's case at a revocation or suspension hearing is necessary.

b. Revocation or Suspension Hearing Procedures

- (1) If the Regional Senior Cal/OSHA Engineer determines that an Applicant's Erection and/or Operating Permit should be suspended or revoked, then approval to deny the Permit shall be obtained from the Deputy Chief for Cal/OSHA Enforcement, through the Regional Manager. Approval to deny shall be granted or denied by the Deputy Chief within 24 hours.
- (2) If the suspension or revocation is approved by the Deputy Chief, the Regional Manager shall follow the Denial Hearing Procedures found in P&P C-41, pp. 18-23.

F. OFFICE PROCEDURES

- 1. When a District Office receives any Tower Crane Erection or Operation Permit Application, or any other documents pertaining to tower cranes, the District Manager shall ensure that District compliance personnel and Office Support Staff immediately forward the Application or other documents to the Regional Senior Cal/OSHA Engineer.
- 2. Upon receipt of a Tower Crane Erection or Operation Permit Application, Regional Office Support Staff shall assign a composite number to the Erection or Operating Permit composed of:

- a. The number of the Region where the tower crane activity will take place;
- b. The number of the District where the tower crane activity will take place; and
- c. A number, beginning with the number one (1), indicating the order in which the permit was received based on the calendar year.
- 3. The Regional Senior Cal/OSHA Engineer, or designated Cal/OSHA engineer, shall review all Erection and Operating Permit Applications to determine if the application is complete and if the appropriate Application Fee for an Erection Permit (\$350) and for an Operating Permit (\$200), made payable to the Department of Industrial Relations, has been included with the application.
- 4. After determining that the Application is complete, the Regional Senior Cal/OSHA Engineer, or other designated Cal/OSHA engineer, shall determine whether a Tower Crane Safety Permit Conference shall be conducted.
- 5. After review of an Erection Permit Application, the Regional Senior Cal/OSHA Engineer, or other designated Cal/OSHA engineer, shall sign the Erection Permit and issue the Permit to the Applicant.
- 6. After review of an Operating Permit, the Regional Senior Cal/OSHA Engineer, or other designated Cal/OSHA engineer, shall issue the Operating Permit after conducting an inspection of the tower crane and assessing the appropriate fee for the hours spent on the inspection--\$75 per hour per Cal/OSHA engineer present on-site up to a maximum of two (2) Cal/OSHA engineers.
- 7. The Regional Office Support Staff shall maintain a file for each Erection and Operating Permit which shall contain copies of the following items:
- a. Erection Permit File Contents
- (1) Permit Application and the Erection Permit;
- (2) Load charts for crane which erects the tower crane;
- (3) Load charts for the crane which dismantles the tower crane;
- (4) Plan view for the erection site;

- (5) Erection sequence and loads for each lift with appropriate rigging deductions;
- (6) Elevation view for dismantling;
- (7) Dismantle sequence and loads for each lift with appropriate rigging deductions;
- (8) Letter to a District Manager from the Regional Senior Cal/OSHA Engineer acknowledging that a tower crane is operating in his or her District;
- (9) Letter to Accounting Unit transmitting the Erection Permit Fee; and
- (10) Letter to the Applicant acknowledging receipt of the application and the application fee.
- b. Operating Permit File Contents
- (1) Permit Application and the Operating Permit;
- (2) Foundation design, and verification that the "as built" foundations are in accordance the design;
- (3) Bolt-torque verification;
- (4) Verification that overload limits are correctly set;
- (5) Crane Certification;
- (6) Plan view showing radius of operation and anticipated loads;
- (7) Tower crane load charts;
- (8) Notice of Tower Crane Deficiencies, if any;
- (9) Verification of correction of Deficiencies;
- (10) Verification of annual non-destructive tests.
- (11) Letter to a District Manger from the Regional Senior Cal/OSHA Engineer acknowledging that a tower crane is operating in his or her District.
- (12) Letter to Accounting Unit transmitting the Erection Permit Fee.

- (13) Letter to the Applicant acknowledging receipt of the application and the application fee; and
- (14) All Notifications of Tower Crane Activity Change.

NOTE: Each Region shall develop an electronic log and summary which shall include the items contained in Attachment J.

G. FORMS DISTRIBUTION

- 1. The original of Erection Permit shall be issued to the Applicant at the time the application is approved. The original of the Operating Permit shall be given to the Applicant after an inspection of the tower crane is completed.
- 2. A copy of any Erection or Operating Permit, along with a copy of the check or money order, shall be placed in the Applicant's Regional Office Permit file.
- 3. A copy of the Permit, along with the check or money order and the Permit Applicant's federal Tax ID Number, shall be sent to the Accounting Office, P.O. Box 420603, San Francisco, CA 94142. Do not send cash.
- 4. Copies of the erection and operating permits, records of all checks for fees paid and the notification of tower crane deficiencies shall be sent to the Crane Unit on a monthly basis.

ATTACHMENTS:

A -- Tower Crane Inspection Checklist [EXAMPLE NOT AVAILABLE]

B -- Safety Permit Conference Checklist

C -- Tower Crane Erection Permit Application

(Cal/OSHA C-41A-1 Page One) (Cal/OSHA C-41A-1 Page Two)

D -- Tower Crane Operation Permit Application

(Cal/OSHA C-41A-2 Page One) (Cal/OSHA C-41A-2 Page Two)

E -- Tower Crane Erection Permit

(Cal/OSHA C-41A-3 Page One) (Cal/OSHA C-41A-3 Page Two)

F -- Tower Crane Operation Permit

(Cal/OSHA C-41A-4 Page One) (Cal/OSHA C-41A-4 Page Two)

G -- Notice of Tower Crane Deficiencies

(Cal/OSHA C-41A-5 Page One) (Cal/OSHA C-41A-5 Page Two)

H -- Notification of Tower Crane Activity

Change (Cal/OSHA C-41A-6)

I -- Disclosure of Previous Business Identities

(<u>Cal/OSHA C-41A-7</u>)

J -- Optional Tower Crane Permit Log and

Summary (<u>Cal/OSHA C-41A-8L</u>)