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Attachment No. 2

**INITIAL STATEMENT OF REASONS**

## CALIFORNIA CODE OF REGULATIONS

TITLE 8: Chapter 4 Subchapter 15, Article 5, Section 6777  
of the Petroleum Safety OrdersHot Work PermitsSUMMARY

This proposed rulemaking action is being initiated as a result of an Occupational Safety and Health Appeals Board (OSHAB) Decision After Reconsideration, Docket No. 94-R3D5-2087. In a memorandum to the Standards Board dated November 17, 1999, the OSHAB suggested the language in Section 6777 be revised to clarify the safety precautions an employer must take before introducing a source of ignition into a workspace and to emphasize that the employer's responsibility for issuance of a hot work permit is an essential procedure for ensuring that these safety precautions have been completed.

Section 6777 is contained in the Petroleum Safety Orders, which apply to the refining, storage and handling of petroleum, natural gas, and their products; including the construction, maintenance and operation of such equipment. There is no federal counterpart to the Petroleum Safety Orders. Existing Section 6777(a) requires the employer to issue a hot work permit before a source of ignition is used, such as for welding, grinding, drilling. It also identifies hot work operations that are exempt from the permit requirement. Section 6777(b), (c), (d), and (g) contain requirements related to the posting, content, termination, and filing of hot work permits. Section 6777(e) and (f) identify the actions and conditions required before a hot work permit is issued. Finally, Section 6777(h) and (i) require fire extinguishing equipment for hot work and the control of ignition sources in locations where flammable gases or vapors may be present.

This proposal would amend Section 6777 to more clearly state (1) its scope and application, (2) the safety precautions that an employer must complete before hot work is begun, and (3) the provisions related to hot work permits and their issuance. It proposes to relocate many of the requirements contained in the existing regulation so that the provisions are easier to identify and understand. The proposal also would amend subsections in the current regulation to require employers to take basic safety precautions before performing hot work operations, regardless of whether a permit is required. Language

would also be added to require that before hot work is begun, the employer shall test for flammable vapors and gases when it is reasonable to expect that they may be present in hazardous concentrations, much as the existing regulation requires the employer to test when hot work is resumed after the work is interrupted. Finally, in order to give guidance to the employer on how to comply with the existing requirement to eliminate or control sources of ignition when flammable vapors are present, the proposal would specify the maximum concentration of flammable vapors allowed.

### SPECIFIC PURPOSE AND FACTUAL BASIS OF PROPOSED ACTION

This proposed rulemaking action contains numerous nonsubstantive, editorial, reformatting of subsections, and grammatical revisions. These nonsubstantive revisions are not all discussed in this Informative Digest. However, these proposed revisions are clearly indicated in the regulatory text in underline and strikeout format. In addition to these nonsubstantive revisions, the following actions are proposed:

#### Section 6777. Hot Work Permits.

Section 6777 outlines various requirements pertaining to the performance of hot work and the issuance of hot work permits. It is proposed to amend the title of the section to read, "Hot Work Procedures and Permits," adding "procedures" to more accurately reflect the contents of the section.

#### Subsection (a)

Existing subsection (a) requires a written and numbered hot work permit to be issued and signed by the employer or his authorized agent before a source of ignition is used. Existing subsection (a) further lists several exceptions to this hot work permit requirement.

A revision is proposed to relocate and reletter the hot work permit requirement to proposed new subsection (e), in order to consolidate the requirements specific to hot work permits to the latter part of the section. A new subsection (a) is proposed entitled, "Scope and Application," which reads, "This section contains the required practices and procedures necessary to protect employees from fire and explosion hazards associated with hot work." The proposed new subsection (a) further states, "This section applies to all hot work operations, except as provided in subsections (a)(1) and (a)(2)." Proposed new subsection (a)(1) would list operations that are exempt from all of the requirements of the section. The proposed new subsection (a)(2) would list operations that need only comply with the hot work safety procedures in proposed new subsections (b), (c), and (d). The exempt operations listed in existing subsection (a) would be retained, edited for clarity, and relettered as subsections of new (a)(1) and (a)(2).

The proposed revisions are necessary to clarifying the scope and application of this section. It would distinguish between those operations that require adherence to hot work safety procedures and a hot work permit, and those operations that require adherence to the hot work safety procedures but do not require a permit.

### Subsection (b)

Existing subsection (b) requires the employer to provide the employee or post a copy of the permit prior to initiation of a source of ignition, except as specified in subsection (a) of this section. The copy of the permit shall be kept on the job where the source of ignition is being used until the work is completed, the permit expires, or is revoked.

It is proposed that subsection (b) be relocated and relettered to proposed new subsection (f), in order to consolidate the requirements specific to hot work permits to the latter part of the section. A new subsection (b) is proposed, entitled “Hot work procedures,” composed primarily of existing subsections (e), (f) and (i), and revised to apply to hot work procedures rather than directly to permits.

Existing subsection (e) requires the employer to determine that the source of ignition may be safely used prior to issuing a hot work permit. Existing subsection (e) also prohibits a hot work permit from being issued unless the flammable gas or vapor content is less than 20 percent of the lower explosive limit (LEL). Existing subsection (f) states that when a hot work permit is issued, the following requirements (if applicable) shall be met: (1) Oil accumulations or other combustible materials in exposed areas shall be removed or protected from ignition, and (2) Gauge glasses containing flammable liquids, vapors or gases and exposed to the spatter of molten metal shall have their valves closed and be drained, or the gauge glasses shall be guarded. Finally, existing subsection (i) requires that in locations where flammable vapors may be present, precautions shall be taken to prevent ignition by eliminating or controlling sources of ignition.

Proposed new subsection (b) would combine these aforementioned subsections to read, “Before hot work is begun, the employer shall determine that a source of ignition can be safely used. In locations where flammable vapors may be present, precautions shall be taken to prevent ignition by eliminating or controlling sources of ignition. A source of ignition shall not be introduced into an area until all of the following required actions have been completed:

- (1) Tests for the presence of flammable gases and vapors shall be made when the concentration of flammable gases or vapors may reasonably be expected to exceed 20 percent of the lower explosive limit (LEL). The tests shall confirm that the concentration of flammable gases and vapors does not exceed 20 percent of the LEL.
- (2) Oil accumulations or other combustible materials shall be removed or protected from ignition when present in exposed areas.
- (3) The gauge valves shall be closed and the gauges drained, or the gauge glasses shall be guarded when gauge glasses contain flammable liquids, vapors or gases and are exposed to the spatter of molten metal.”

The proposed revisions are necessary to distinguish the requirements pertaining to hot work procedures, which apply to all hot work operations, from those requirements specific to hot work permits.

### Subsection (c)

Existing subsection (c) outlines what a hot work permit shall contain. It is proposed that this requirement be relocated and relettered to a proposed new subsection (g) in order to consolidate the requirements specific to hot work permits to the latter part of the section.

New subsection (c) is proposed which would prohibit a source of ignition from being used where the concentration of flammable gases or vapors exceeds 20 percent of the LEL. This new subsection is necessary to emphasize to the employer that hot work cannot be performed where the hazard of fire and/or explosion exists.

### Subsection (d)

Existing subsection (d) outlines the conditions for terminating a hot work permit. Existing subsection (h) requires that suitable fire extinguishing equipment be available to the employees who are using a source of ignition. It is proposed to editorially revise and switch these two subsections, relocating and relettering existing subsection (h) as proposed new subsection (d), and existing subsection (d) as proposed new subsection (h). Proposed new subsection (d) would require suitable fire extinguishing equipment to be readily available in the area where hot work is performed.

These proposed revisions are necessary to distinguish the general requirements pertaining to hot work procedures from those requirements pertaining to hot work permits, which are to be addressed in the latter part of the section. The proposed revisions are also necessary to clarify that the requirement to have suitable fire extinguishing equipment readily available pertains to all hot work operations, not merely those that require a permit.

### Subsection (e)

Existing subsection (e) requires the employer to determine that the source of ignition may be safely used prior to issuing a hot work permit. Existing subsection (e) also prohibits a hot work permit from being issued unless the flammable gas or vapor content is less than 20 percent of the lower explosive limit (LEL). This requirement is proposed to be relocated to new subsection (b).

This proposal would editorially revise and relocate existing subsection (a) as a new subsection (e), entitled "Hot work permits." Proposed new subsection (e) would state that, except for those operations identified in subsection (a)(2), a written and numbered hot work permit shall be completed, signed and issued by the employer or his authorized agent before a source of ignition is used. As part of this hot work permit issuance procedure, the employer would be required to verify that all of the required actions identified in proposed subsection (b) be completed before a hot work permit is issued.

The proposed revisions are necessary to distinguish the requirements pertaining to hot work permits from the hot work procedures which pertain to all hot work operations, and will ensure that the necessary, and newly clarified, hot work safety procedures are met prior to issuing a permit.

#### Subsection (f)

Existing subsection (f) states that when a hot work permit is issued, the following requirements (if applicable) shall be met: (1) Oil accumulations or other combustible materials in exposed areas shall be removed or protected from ignition, and (2) Gauge glasses containing flammable liquids, vapors or gases and exposed to the spatter of molten metal shall have their valves closed and be drained, or the gauge glasses shall be guarded. These provisions are proposed to be editorially revised and incorporated into subsection (b).

This proposal would editorially revise and relocate existing subsection (b) as new subsection (f), which states that before an employee introduces a source of ignition, the employer shall provide a copy of the hot work permit to the employee or shall post a copy of the permit in the area of the planned hot work. The copy of the permit shall be kept on the job where the source of ignition is being used until the work is completed, or the permit expires or is revoked.

The proposed revisions are necessary to distinguish the requirements pertaining to hot work permits from those that pertain to hot work procedures which apply to all hot work operations.

#### Subsection (g)

Existing subsection (g) requires that a copy of each permit issued be kept on file at the plant of issue for at least six months after date of issue. It is proposed that this requirement be relocated and relettered as subsection (i). It is proposed that the specifications in existing subsection (c), which outline what a hot work permit shall contain, be relocated and relettered as new subsection (g). The proposed relocation and relettering of the subsection is necessary for clarity purposes.

#### Subsection (h)

Existing subsection (h) requires that suitable fire extinguishing equipment be available to the employees who are using a source of ignition. Existing subsection (d) outlines the conditions for terminating a hot work permit. It is proposed to editorially revise and switch these two subsections, relocating and relettering existing subsection (h) as proposed new subsection (d), and existing subsection (d) as proposed new subsection (h). The editorial revisions, relocation, and relettering of the subsections are necessary to distinguish the requirements applicable to hot work procedures vs. hot work permits.

#### Subsection (i)

Existing subsection (i) requires that in locations where flammable vapors may be present, precautions shall be taken to prevent ignition by eliminating or controlling sources of ignition. It is proposed to relocate this requirement to proposed new subsection (b) in order to consolidate the requirements for hot work procedures, which are applicable to all hot work operations, to the beginning part of the section.

Existing subsection (g) requires that a copy of each permit issued be kept on file at the plant of issue for at least six months after date of issue. It is proposed to relocate and reletter this requirement as new

subsection (i). For clarity purposes, it is proposed that the phrase, “The employer issuing the hot work permit shall keep,” be added at the beginning of sentence. The proposed revisions are necessary for clarity purposes.

#### DOCUMENTS RELIED UPON

1. Memo from Janet M. Eagan, Executive Officer, Occupational Safety and Health Appeals Board to John MacLeod, Executive Officer, Occupational Safety and Health Standards Board, dated November 17, 1999.
2. Decision After Reconsideration, Docket No. 94-R3D5-2087, Occupational Safety and Health Appeals Board dated June 9, 1999.

These documents are available for review Monday through Friday from 8:00 a.m. to 4:30 p.m. at the Standards Board Office located at 2520 Venture Oaks Way, Suite 350, Sacramento, California.

#### DOCUMENTS INCORPORATED BY REFERENCE

None.

#### REASONABLE ALTERNATIVES THAT WOULD LESSEN ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES

No reasonable alternatives were identified by the Board and no reasonable alternatives identified by the Board or otherwise brought to its attention would lessen the impact on small businesses.

#### SPECIFIC TECHNOLOGY OR EQUIPMENT

This proposal will not mandate the use of specific technologies or equipment.

#### COST ESTIMATES OF PROPOSED ACTION

##### Costs or Savings to State Agencies

No costs or savings to state agencies will result as a consequence of the proposed action.

##### Impact on Housing Costs

The Board has made an initial determination that this proposal will not significantly affect housing costs.

### Impact on Businesses

The Board has made an initial determination that this proposal will not result in a significant, statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states.

### Cost Impact on Private Persons or Businesses

The Board is not aware of any cost impact that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

### Costs or Savings in Federal Funding to the State

The proposal will not result in costs or savings in federal funding to the state.

### Costs or Savings to Local Agencies or School Districts Required to be Reimbursed

No costs to local agencies or school districts are required to be reimbursed. See explanation under “Determination of Mandate.”

### Other Nondiscretionary Costs or Savings Imposed on Local Agencies

This proposal does not impose nondiscretionary costs or savings on local agencies.

## DETERMINATION OF MANDATE

The Occupational Safety and Health Standards Board has determined that the proposed regulation does not impose a local mandate. Therefore, reimbursement by the state is not required pursuant to Part 7 (commencing with Section 17500) of Division 4 of the Government Code because the proposed amendment will not require local agencies or school districts to incur additional costs in complying with the proposal. Furthermore, this regulation does not constitute a “new program or higher level of service of an existing program within the meaning of Section 6 of Article XIII B of the California Constitution.”

The California Supreme Court has established that a “program” within the meaning of Section 6 of Article XIII B of the California Constitution is one which carries out the governmental function of providing services to the public, or which, to implement a state policy, imposes unique requirements on local governments and does not apply generally to all residents and entities in the state. (County of Los Angeles v. State of California (1987) 43 Cal.3d 46.)

The proposed regulation does not require local agencies to carry out the governmental function of providing services to the public. Rather, the regulation requires local agencies to take certain steps to ensure the safety and health of their own employees only. Moreover, the proposed regulation does not in any way require local agencies to administer the California Occupational Safety and Health program. (See City of Anaheim v. State of California (1987) 189 Cal.App.3d 1478.)

The proposed regulation does not impose unique requirements on local governments. All employers - state, local and private - will be required to comply with the prescribed standard.

#### EFFECT ON SMALL BUSINESSES

The Board has determined that the proposed amendments may affect small businesses. However, no economic impact is anticipated.

#### ASSESSMENT

The adoption of the proposed amendments to this regulation will neither create nor eliminate jobs in the State of California nor result in the elimination of existing businesses or create or expand businesses in the State of California.

#### ALTERNATIVES THAT WOULD AFFECT PRIVATE PERSONS

No reasonable alternatives have been identified by the Board or have otherwise been identified and brought to its attention that would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.