CTPAC-SC Proposal

Subject: Crane Length, Annual Trip Permit

Date: October, 15 2015

Policy:

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1. OBJECTIVE

To modify the current policy allowing any crane that meets requirements of the Turning Test as outlined in TPM 305.3.7.3 be allowed an annual permit with no restriction of overall length.

2. BACKGROUND

Currently truck cranes, AT cranes, and low profile cab cranes are not allowed an annual permit if total overall length is greater than 80'.

3. EXISTING DOCUMENTATION, POLICY

Subject: Truck Crane Length
Date: October 9, 2002
Policy: TPPM 2002-08

Objectives

To provide increased allowable length for crane carriers that exceeds the 40'0" maximum single vehicle length per CVC 35400.

Existing Documentation

The following sources contain information related to this subject:

Transportation Permits Manual (TPM)

Chapter

3 – Vehicle Qualification and Inspection
305 – Fixed Load Vehicles

305.3 - Truck Cranes

305.3.7 Truck Crane Length

Truck cranes moved under permit shall conform to the 40 feet maximum legal vehicle length provision of 35400 V.C. except a six-axle crane carrier shall not exceed 50 feet in length. Truck cranes in combination with boom dolly or trailer shall not exceed an overall length of 75 feet, measured from the front of the crane carrier to the end of dolly or trailer. The maximum overall length, including boom, shall not exceed 80 feet.

Per TPPM 2000-3: *Exception:* A crane with a low profile, cab forward type crane carrier is allowed an 80'0" maximum combination length provided that it meets the off-tracking ability of a 75'0" long crane.

Transportation Permit Manual Changes

1) Add the following paragraph to Section 305.3.1

The policy relating to permitting cranes does not apply to fixed loads (such as concrete pumps, shovels, drilling, or servicing equipment) that may be categorized as cranes by a court of law for licensing vehicles. The mast and boom extensions of all fixed loads are adjudicated by CVC 35407 unless permitted by the policies of the Department of Transportation.

2) Change Section 305.3.3 to read as follows:

305.3.3 Grandfathered Exemption

Cranes under permit prior to September 2002 and which exceed the current policy and regulations may continue to be moved under permit with special waiver until phased out of operation if in the Department's judgement it is impractical or unreasonable to make conforming modifications.

3) Change Section 305.3.7 to read as follows:

305.3.7 Truck Crane Length

305.3.7.1 Truck Crane Carrier Length

Truck crane carriers shall conform to the 40'-0" maximum legal single vehicle length per CVC 35400.

Exceptions:

- Four or Five axle, low profile, cab forward type crane carriers shall not exceed 50 feet in length.

- Truck crane carriers with six or more axles shall not exceed 50 feet in length.

- Truck crane carriers with multi-axle steering capability are exempt from carrier length limitations if the turning test requirements in Section 305.3.7.3 are met.

305.3.7.2 Truck Crane Combination Length

Truck cranes in combination with boom support vehicle shall not exceed and overall length of 75'-measured from the front of the crane carrier to the end of the boom support vehicle. The maximum overall length including boom shall not exceed 80'-0".

Exceptions:

- A crane with a low profile, cab forward type crane carrier is allowed 80'-0" maximum combination length provided that it meets the off-tracking ability of a 75'-0" long standard crane.

• Truck crane carriers with steering capability in combination with a boom support vehicle are exempt from combination length limitations if the turning test requirements in Section 305.3.7.3 are met.

305.3.7.3 Turning Test Requirements

A licensed civil or mechanical engineer must stamp, sign, and date a written statement saying that the subject vehicle is in compliance with Section 305.3.7.3 of the Transportation Permits Manual. This statement should be faxed to the inspector when scheduling the vehicle inspection. The inspector should not inspect the vehicle until the turning test has been passed. The turning requirements are as follows:

1. The crane carrier, boom, and boom support vehicle must meet or exceed the turning performance of a 7-axle truck tractor–semitrailer combination. In addition, the crane carrier, boom and boom support vehicle shall not exceed a maximum swept width of 35'-7" when driven through a test track with the following limitations:

• 90-degree turn with an outside radius of 59' 0.7" (18 meters)
• Tangent distance of 150 feet beyond the 90-degree turn.

2. Booms rotated to the front may extend 2'-10" beyond the outside limits of the test track, but this portion of the vehicle shall return to the limits of the test track area before the boom enters the tangent area.

3. If the self-contained truck crane requires steering at both ends of the carrier to comply with the above test, it shall be designed so that the steering geometry cannot be altered whenever the crane is configured for highway movement.

4. If the boom support vehicle requires steering to comply with the above test, it shall be designed so that the steering geometry cannot be altered whenever the crane is configured for highway movement.

Original Signed By Joseph Hopper, Chief 10/9/2002

4. PROPOSED CHANGE

Any crane be exempt from combination length limitations and qualify for annual permit if the turning test requirements are met as described in section 305.3.7.3

Overall length for qualified cranes would be limited by the requirements outlined in TPM 305.3.7.3

Requestor:

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