



Transportation Permits Policy Memorandum

To: Region Managers and Permits Personnel **Date:** June 26, 2000

From: RICH WILLIAMS, Chief
Transportation Permits Branch **Policy:** TPPM 2000-4, revised

Subject: **Mixed Suspension on Rotator-Type Tow Trucks**

Summary of Revisions

This revision changes the operating radius of rotator-type tow trucks from 25 to 100 miles.

Background

The California Transportation Permits program does not allow extralegal weight on mixed suspension systems due to concern over the possibility of a dynamically induced weight imbalance within the axle loading group.

Rotator-type tow trucks are used to quickly upright overturned vehicles in high traffic areas with minimal impact to the flow of traffic. Several existing rotator tow trucks use mixed suspension systems. Caltrans recognizes that the benefits of rotator-type tow trucks outweighs the potential damage caused by their mixed suspension systems.

Existing Documentation

Relevant Transportation Permits Manual (TPM) sections, quoted in part, are:

Section 302.5.3 Axle Loading Group - The "axle loading group" is all axles within an 18'0" axle bridge regardless of whether they use a common suspension or not.

Section 302.4 Suspension Systems - All axles in the same suspension group shall have a common suspension system that naturally divides the weight between all axles equally and equitably, both statically and dynamically under all loading conditions without any influence from an outside source.

Transportation Permits Manual (TPM) Changes

- 1) Add the following text to Section 302.4:

Exception for Rotator-Type Tow Trucks – *Rotator-type tow trucks bought and first registered in California prior to May 1, 2000 are allowed to have "Purple" weight on a mixed suspension system provided the following conditions are met: 1) The tow truck is equipped with reliable on-board scales indicating the gross weight on the axle loading group, 2) Each axle within the axle group carries no more than 10% more weight than any other axle in the axle group, 3) The tow truck operates within a 100-mile radius of the tow yard as noted on the face of the permit.*

Rich Williams

June 26, 2000

RICH WILLIAMS, Chief
Transportation Permits Branch

Date