



Zero-Emission Forklifts

Workgroup to Discuss Potential Regulatory Concept

August 17, 2021

Agenda

- Background
- Status Update
- Potential Regulatory Concept
- Next Steps

Background

- Purpose: Accelerate deployment of zero-emission technology in forklifts
- Identified in the SIP, the 2016 Mobile Source Strategy, and the Sustainable Freight Action Plan
- Aligns with the directives in Governor's Executive Order N-79-20

Status Update

- 1st Workshop in October 2020
- Met with stakeholders and obtained feedback/information through individual meetings
- Developed regulatory concept discussion paper, which will be discussed today
- 2nd Workshop in October 2021 (tentative)
- Board consideration in 2022

Staff Goals for the Regulatory Concept Discussion

- Gather feedback on the potential regulatory approach described in the Discussion Paper.
 - Scope and Structure
 - Language Specifics (e.g., accuracy, consistency, clarity, etc.)
 - Anticipated Impacts/Challenges
- Hear suggestions for alternative approaches/provisions that could achieve equivalent outcomes.

Regulatory Concept Discussion Paper:

Section 0. Purpose, Applicability, and Definitions

Applicability (Page 2 of Discussion Paper):

- Internal combustion forklifts up to 12,000 lb. lift capacity
- Not included:
 - Rough terrain forklifts
 - Military tactical vehicles
 - Pallet jacks
 - Forklifts owned or operated by facilities subject to the Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards Regulation

Potential Definition for “Forklift”

(Page 3 of the Discussion Paper)

“**Forklift**” means a self-propelled industrial truck whose primary purpose is to lift, transport, and stack heavy loads. A forklift consists of a chassis with three or more wheels, an area for the forklift operator to ride, and the following components in front of the operator: a lift cylinder and a vertical or slightly angled mast, to which a carriage is mounted. To lift loads, the forklift carriage generally has attachments. The most typical configuration is for two forks and a load backrest to be attached to the carriage, but specialized attachments also exist to serve other purposes. Forklifts do not have telescoping booms.

Potential Definition for “Rough Terrain Forklift” (Page 4 of the Discussion Paper)

“**Rough Terrain Forklift**” means a forklift designed specifically for outdoor operation on uneven surfaces. Rough terrain forklifts have a tire tread depth of XX or greater inches, forklift ground clearance of at least XX inches, and tires with a diameter of at least XX inches.

Feedback Requested

- Feedback on Potential Applicability
- Feedback on Potential Definitions
 - “Forklift”
 - “Rough Terrain Forklift”
 - “Others
- Other Comments/Feedback on Potential Applicability and Definitions

Regulatory Concept Discussion Paper: *Section 1. General Requirements*

- General Requirements (Page 4 of Discussion Paper)

Fleet Type per Year of Implementation	General*
ZE Mandate on New Acquisitions	2025
Retirement of 2012 MY & older IC Forklifts	2025
Increase retirement MY beyond 2012 (one year at a time)	2026

* Implementation dates January 1st of each year

Feedback Requested

- Feedback on Potential Approach and Structure
- Suggestions for Alternative Approaches

Regulatory Concept Discussion Paper: *Section 1. General Requirements*

- Small Business Requirements (Page 5 of Discussion Paper)

Fleet Type per Year of Implementation	General*	Small Business*
ZE Mandate on New Acquisitions	2025	2030
Retirement of 2012 MY & older IC Forklifts	2025	2030
Increase retirement MY beyond 2012 (one year at a time)	2026	2031

* Implementation dates January 1st of each year

Feedback Requested

- Feedback on the Potential Small Business Provisions
 - Approach
 - Definition of “Small Business”
 - Criteria to Qualify
- Suggestions for Alternative Approaches

Regulatory Concept Discussion Paper: *Section 2. Exemptions*

Exemptions (Page 6 of Discussion Paper)

Potential exemption concepts based on discussions with stakeholders:

- Emergency operation forklifts
- Rental forklifts
- Low-use forklifts
- Remote location forklifts

Feedback Requested

- Feedback on Potential Exemption Concepts
 - Need
 - Supporting Information
- Other Comments/Feedback

Regulatory Concept Discussion Paper:

Section 3. Reporting and Labeling Requirements

- Potential Reporting Requirements (Page 7 of Discussion Paper)
 - Online reporting on DOORS system, already used for LSI and ORD regulations
 - Similar company and equipment information
 - Existing equipment would continue to use same EIN
 - A separate annual attestation would be required
- Potential Labeling Requirements (Page 10 of Discussion Paper)

Feedback Requested

- Feedback on Potential Reporting Requirements
- Feedback on Potential Labeling Requirements
- Suggestions for Alternatives to Potential Requirements
- Other Comments/Feedback on Potential Reporting and Labeling Requirements

Next Steps

- Obtain feedback/information from stakeholders through individual meetings and emails
- 2nd workshop in October 2021 (tentative)
- Board consideration in 2022

Contacts

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Inventory Update

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Webpage & Email Sign-Up

- **Webpage:**
 - <https://ww2.arb.ca.gov/our-work/programs/zero-emission-forklifts>
- **Sign-Up for Zero-Emission Forklifts Email Updates**
 - https://public.govdelivery.com/accounts/CARB/subscriber/new?topic_id=zeforklifts