

Zero-Emission Forklift Rulemaking: August 17th 2021 Public Workgroups

Morning Workgroup

Time: 9:00 a.m. - 12:00 p.m. (PDT)

Location/Web link: <https://attendee.gotowebinar.com/register/122240820416920587>

or

Afternoon Workgroup

Time: 4:00 p.m. - 7:00 p.m. (PDT)

Location/Web link: <https://attendee.gotowebinar.com/register/5413397537331625227>

Agenda

- Status Update
- Regulatory Concept
- Next Steps

REGULATORY CONCEPT DISCUSSION PAPER

This attached document provides initial draft regulatory concepts and language that, along with staff's workgroup presentation, are intended to facilitate discussion and stakeholder feedback. This document should not be construed as a formal regulatory proposal. All elements of this preliminary draft are open to feedback, including the language, stringency, and framework.

Note: staff comments and questions to facilitate stakeholder review are provided in blue text boxes, such as this one.

The preliminary draft regulatory concepts and language are organized as follows:

- Section 0: Zero-Emission Forklift Purpose, Applicability and Definitions
- Section 1: General Requirements, including
 - (1) Zero-emission requirements
 - (2) Small business requirements and qualification criteria
 - (3) Dealership and rental agency requirements
- Section 2: Exemptions
- Section 3: Reporting and Labeling Requirements

AUGUST 2021 DISCUSSION DRAFT FOR A POTENTIAL ZERO-EMISSION FORKLIFT FLEET REQUIREMENTS REGULATION

Section 0. Purpose, Applicability, and Definitions.

(a) Purpose. **The purpose of this article is to accelerate the transition to zero-emission forklifts throughout the state in order to reduce emissions of oxides of nitrogen (NO_x), fine particulate matter (PM), other criteria pollutants, toxic air contaminants, and greenhouse gasses (GHG).**

(b) Applicability

- (1) Except as provided in (b)(2), this article applies to any person, business, or government agency who owns or operates within California any forklift with an adjusted lift capacity, as defined in section (c), of 12,000 lbs. or below.
- (2) The following equipment types are not subject to this article:
 - (A) Rough terrain forklifts
 - (B) Military tactical vehicles
 - (C) Pallet jacks
 - (D) Forklifts owned or operated by facilities subject to the Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards Regulation.

(c) Definitions. **The following definitions apply to this article:**

- (1) "Dealership" means an entity engaged in the business of selling or leasing of applicable forklifts to an ultimate purchaser. A dealership may also be a rental agency if it meets the definition in (14) of this subsection.
- (2) "Designated Official" means a person designated by the responsible official as the person responsible with the task of providing the required information to the California Air Resources Board pursuant to section 3, subsection (a) on behalf of the responsible official.
- (3) "Emergency operation" means helping alleviate an immediate threat to public health or safety. Examples of emergency operation include repairing or preventing damage to roads, buildings, terrain, and infrastructure as a result of an earthquake, flood, storm, fire, other infrequent act of nature, or terrorism. Routine maintenance or construction to prevent public health risks does not constitute emergency operation.
- (4) "Entity" means a person, business or government agency described in section 0(b)(1).
- (5) "Equipment Identification Number" or "EIN" means a unique identification number assigned by the Executive Officer to a piece of

**Deliberative Document
For Discussion Purposes Only**

equipment once the piece of equipment has been reported in accordance with section 3, subsection (a). The EIN is used to link all reporting and recordkeeping required under this Article.

- (6) "Executive Officer" means the Executive Officer of the California Air Resources Board, or his or her delegate.
- (7) "Facility" means a location where an entity operates one or more forklifts.
- (8) "Fleet" means all applicable forklifts that are owned or controlled by a common entity and are operated within California. Individual federal or state agencies may report as separate entities.
- (9) "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 angled mast, to which a carriage is mounted. In order for the forklift to lift loads, the 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.
- (10) "Internal combustion forklift" means a forklift powered by an internal combustion engine.
- (11) "Lift Capacity" means the weight that a forklift is rated to lift at a 24--inch load center. A lift capacity given at other load centers can be converted to a 24-inch load center through the following calculation:
 - (A) Divide the lift capacity as stated on the data plate by the corresponding load center, in inches, stated on the data plate, and
 - (B) Multiply the result in (A) by 24 inches.
- (12) "Model Year" means the manufacturer's annual production period, which includes January 1 of a calendar year or, if the manufacturer has no annual production period, the calendar year.
- (13) "Pallet Jack" means a piece of equipment that is designed to lift pallets but is pulled by hand and is not designed to be ridden.
- (14) "Rental Agency" means a business engaged in the practice of providing forklifts for rent. A rental agency may also be a dealership if it meets the definition in (1) of this subsection.

**Deliberative Document
For Discussion Purposes Only**

- (15) "Responsible Official" means a person who makes decisions on behalf of an entity, including dealerships and rental agencies, regarding that entity's forklifts.
- (16) "Revenue Forklift" means any forklift owned or controlled by Dealerships or Rental Agencies and intended for the sale, lease, or rental to another entity instead of being used by the Dealership or Rental Agency itself to lift or stack materials.

Staff is looking for feedback on how to better define "Rough Terrain Forklift" based on the unique characteristics of this type of forklift.

- (17) "Rough Terrain Forklift" means a forklift designed specifically for outdoor operation on uneven surfaces. Rough terrain forklifts have a tire tread depth of at least [TBD] inches, forklift ground clearance of at least [TBD] inches, and tires with a diameter of at least [TBD] inches.
 - (18) "Ultimate Purchaser" means an entity who in good faith purchases, leases, or rents a forklift for purposes other than resale or rental to others.
 - (19) "Zero-Emission Forklift" means a forklift that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any and all possible operational modes and conditions.
- (d) Continuous Compliance. A Responsible Official of a fleet is required to keep his equipment in compliance with this regulation, once it is in compliance, so long as the entity is operating the equipment in California, and continue to maintain records, report to the Executive Officer, and keep forklifts labeled pursuant to section 3, subsections (a) and (b).

Section 1. General Requirements.

(a) Except as provided in Section 2, the following requirements apply.

- (1) Entity Requirements. An entity that operates one or more applicable forklifts:
 - (A) Shall not operate an applicable internal combustion forklift purchased or leased after January 1, 2025; and
 - (B) Starting January 1, 2025, shall not operate an applicable internal combustion forklift that is more than 13 years old or is powered by an engine that is more than 13 years old.

**Deliberative Document
For Discussion Purposes Only**

- (C) Engine age shall be determined by subtracting the engine model year from the current calendar year. Similarly, the age of the forklift shall be determined by subtracting the forklift model year from the current calendar year.

Staff is seeking feedback on how to define small businesses, as well as determine the documentation, such as tax information, that would be required for regulated entities seeking to comply under the small business provision.

- (2) Small business. In lieu of the requirement set forth in section (a)(1), an entity that operates one or more applicable forklifts and qualifies as a small business:
 - (A) Shall not operate an applicable internal combustion forklift purchased or leased after January 1, 2030; and
 - (B) Starting January 1, 2030, shall not operate an applicable internal combustion forklift that is more than 18 years old or is powered by an engine that is more than 18 years old.
 - (C) Engine age shall be determined by subtracting the engine model year from the current calendar year. Similarly, the age of the forklift shall be determined by subtracting the forklift model year from the current calendar year.
 - (D) Shall report pursuant to the requirements in Section 3(e).
- (3) Reporting as per section 3. Beginning January 1, 2024, the Responsible Official must maintain records for and report all forklifts in accordance with section 3, subsection (a).
- (4) Labeling as per Section 3. Beginning January 1, 2024, Responsible Official must label each applicable forklift in accordance with section 3,
- (5) Forklifts owned by dealerships or rental agencies that are not revenue forklifts are subject to the requirements in this subsection.

(b) Disclosure of Regulation Applicability: Any entity in California, including Dealerships and Rental Agencies, selling or providing for rent a forklift subject to this regulation must provide the following disclosure in writing to the buyer or renter on the bill of sale or rental agreement:

“All entities that operate one or more forklifts are subject to California’s Zero-Emission Forklift Regulation. This regulation requires registration of most forklifts with the California Air Resources Board, and may also impose an early retirement requirement. For more information, please visit the California Air Resources Board

website at <https://ww2.arb.ca.gov/our-work/programs/zero-emission-forklifts>.”

Section 2. Exemptions.

Staff is seeking input on the following potential exemptions that have been brought up by stakeholders:

- a. Emergency operations forklifts
- b. Rental forklifts
- c. Low-use forklifts
- d. Forklifts used at locations not connected to the electrical grid

Concrete examples illustrating how an exemption would address a unique challenge or obstacle would be particularly helpful. Staff also encourages contacting staff directly if stakeholders believe providing examples, explanations, and other additional information at a one-on-one meeting between the stakeholder and staff would be more effective.

Section 3. Reporting and Labeling Requirements.

(a) Reporting Requirements.

- (1) A Responsible Official required to report pursuant to section 1(a)(4) must comply with all applicable requirements set forth in section 3, subsection (a).
- (2) A Responsible Official required to report pursuant to section 1, subsection (a)(4) must:
 - (A) Submit to the Executive Officer an Initial Report, which includes all applicable information specified in section 3, subsections (a)(3) and (a)(4), by June 30, 2024, or within 60 calendar days of first operating an applicable forklift in California, whichever is later; and
 - (B) Submit to the Executive Officer an attestation that all reported information is true, accurate, and complete. If no changes to the fleet have occurred in the previous calendar year, the operator must confirm that there have been no changes since the previous reporting. This attestation needs to be submitted by June 30 of each year subsequent to the submittal of the Initial Report; and
 - (C) Notify the Executive Officer of any changes to the entity or fleet and provide the necessary information to fulfill the Responsible Official's reporting obligations under section 1, subsections (a)(3) and (a)(4), within 30 calendar days of such change (Applicable changes include, but are not limited to, equipment removals or additions, changes in exemption status, and fleet ownership changes); and
 - (D) Retain, at the Responsible Official's facility, records of all applicable information specified in subsection (a) of this section for at least five (5) years after the information is reported.
 - (E) Responsible Officials who maintain multiple facilities may aggregate the records at a centralized facility or headquarters. Records for all applicable forklifts at all facilities must be available to the Executive Officer within 30 calendar days upon request.
- (3) Information about the entity. A Responsible Official required to report pursuant to section 1(a)(4) must submit to the Executive Officer:
 - (A) Entity name;
 - (B) Corporate parent name, if applicable;
 - (C) Entity address(es);
 - (D) Contact name(s);

**Deliberative Document
For Discussion Purposes Only**

- (E) Contact phone number(s);
 - (F) Contact e-mail address(es); and
 - (G) Whether this entity is a Rental Agency.
- (4) Forklift information. A Responsible Official required to report pursuant to section 1(a)(4) must, for each applicable forklift, submit to the Executive Officer:
- (A) Existing Equipment Identification Number (EIN), if applicable;
 - (B) Forklift model year;
 - (C) Forklift manufacturer;
 - (D) Forklift model;
 - (E) Forklift serial number;
 - (F) Forklift lift capacity;
 - (G) Date forklift entered fleet;
 - (H) Primary operating location address, or in the case of forklifts offered for short-term rental, the address of the Rental Agency facility where this forklift is based;
 - (I) For zero-emission forklifts:
 - 1. Power source (e.g., battery, fuel cell, etc.);
 - 2. Battery or fuel capacity (e.g., amp-hour for battery, kg for hydrogen fuel cell); and
 - 3. Operating voltage;
 - (J) For internal combustion forklifts:
 - 1. Engine model year;
 - 2. Engine manufacturer;
 - 3. Engine model;
 - 4. Engine serial number;
 - 5. Engine displacement;
 - 6. Power rating (in horsepower or kilowatts); and

**Deliberative Document
For Discussion Purposes Only**

7. Fuel type.
- (K) For rental agency fleets, whether this forklift is a revenue forklift.
- (5) A Responsible Official of a fleet operating rental forklifts must, for each applicable rental forklift, submit to the Executive Officer:
- (A) All applicable information specified in subsections (a)(3) and (a)(4) of this section;
 - (B) Rental Agency name;
 - (C) Rental begin date; and
 - (D) Rental end date.
- (6) A Rental Agency must submit to the Executive Officer, at the time of execution of the rental agreement, for each applicable rental forklift being provided for rent to another entity:
- (A) All applicable information specified in subsections (a)(3) and (a)(4) of this section;
 - (B) Name of the entity renting the forklift;
 - (C) An indication that the entity renting the forklift has submitted all applicable information specified in subsections (a)(3) and (a)(4) of this section;
 - (D) Rental term begin date; and
 - (E) Rental term end date.
- (7) Removal from operation. A Responsible Official required to report pursuant to section 1(a)(4), who removes from operation an applicable forklift, including, but not limited to retiring an applicable forklift, or selling or transferring the ownership of a forklift, must:
- (A) Notify the Executive Officer as required by subsection (a)(2)(C) of this section;
 - (B) Submit to the Executive Officer the date that the applicable forklift was removed from operation;
 - (C) Submit to the Executive Officer the final hour meter reading of the applicable forklift removed from operation, except when returning a rental forklift to the Rental Agency; and
 - (D) Convey to the transferee upon transfer, equipment records, including all

**Deliberative Document
For Discussion Purposes Only**

information required to be reported under subsections (a)(3) and (a)(4) of this section, such as entity, equipment, and engine information, if applicable.

- (8) Reporting must be submitted electronically per the guidelines approved by the Executive Officer for electronic data reporting or by mail to the following address:

California Air Resources Board
Mobile Source Control Division (Zero-Emission Forklift)
P.O. Box 2815
Sacramento, California 95812

(b) Labeling Requirements.

- (1) Responsible Official required to report pursuant to section 1(a)(4) must:
- (A) Report all necessary entity and applicable forklift information to the Executive Officer in accordance with subsection (a) of this section (a unique EIN will be assigned to each applicable forklift once reported);
 - (B) Affix at least one EIN label to each applicable forklift within 30 days of receiving the EIN for such forklifts;
 - (C) Maintain all labels affixed pursuant to section 3, subsection (b), so that they remain permanently affixed to the applicable forklift and the legibility and visibility criteria set forth in section 3, subsection (b)(2) are met at all times;
 - (D) Label each applicable forklift correctly with its assigned EIN; and
 - (E) Maintain records of the applicable forklift purchase date or the date the applicable forklift enters the fleet for newly purchased or acquired applicable forklifts that have not yet been labeled pursuant to section 3, subsection (b).
- (2) *Label Specifications.* Each label affixed pursuant to subsection (b) of this section must meet all the following specifications:
- (A) Each label must contain the assigned EIN;
 - (B) The label must be permanently affixed to the applicable forklift. The label may be applied as a decal or painted directly onto the applicable forklift;
 - (C) The EIN must be in white on a red background;
 - (D) The label must be located in clear view on the outside of the applicable forklift approximately 2 feet above the ground so that the label remains

**Deliberative Document
For Discussion Purposes Only**

visible;

- (E) Each character of the EIN must be at least 3 inches (7.6 centimeters) in height and 1.5 inches (3.8 centimeters) in width; and
- (F) Each character of the EIN must remain legible for the entire life of the applicable forklift.

Staff is looking for feedback on what kind of documentation will be needed to classify an entity as a small business e.g., CA tax documentation and number of employees.

(c) *Small businesses.* In order for the requirements in Section 1(a)(2) to apply to a small business in lieu of the requirements in Section 1(a)(1), the Responsible Official of the small business must submit to the Executive Officer:

- (1) Requirements for reporting as a small business to be determined.

(d) *Naming a Designated Official.* A Responsible Official may name a person as Designated Official to meet the Reporting and Labeling Requirements of Section 3, subsections (a) and (b) on behalf of the Responsible Official. The Designated Official may be used interchangeably with the Responsible Official in parts (2), (3), (4), (5), (6), (7), and (8) of subsection (a), and in subsection (b). To name a person as Designated Official, the Responsible Official must submit to the Executive Officer the following information:

- (A) Designated Official's first and last names;
- (B) Designated Official's job title;
- (C) Designated Official's telephone number;
- (D) Designated Official's mailing address; and
- (E) Designated Official's email address.