

RULE 2306

FREIGHT RAIL YARDS

(a) Purpose

The purpose of this rule is to reduce emissions of Nitrogen Oxides (NOx) associated with Freight Rail Yards and the mobile sources attracted to Freight Rail Yards in order to assist in meeting state and federal air quality standards for Ozone and Fine Particulate Matter, and to ensure that proportional or greater emission reductions occur in the South Coast AQMD jurisdiction from implementation of state regulations addressing Freight Rail Yard emission sources.

(b) Applicability

This rule applies to owners or operators of proposed, new, and existing Freight Rail Yards located within the South Coast AQMD jurisdiction, and any state or local government agency or any non-federal public agency or combination of public agencies such as a joint powers authority who enters into a Contractual Agreement with the owner or operator of such Freight Rail Yards.

(c) Definitions

- (1) AGGREGATE EMISSION FACTOR (AEF) means the average rate of NOx emissions per unit of energy consumed across all Applicable Mobile Sources that are attracted to a Freight Rail Yard during a calendar year.
- (2) APPLICABLE MOBILE SOURCES means the following mobile sources of emissions that may be operated on or through a Freight Rail Yard to transport or assist in transporting cargo or goods: Cargo Handling Equipment, Drayage Trucks, Line Haul Locomotives, Switch Locomotives, Transportation Refrigeration Units, and/or Other On-Site Support Equipment.
- (3) BASE PERIOD (BP) means the period over the first two full calendar years immediately following the calendar year when the rule becomes effective, except that for a New Freight Rail Yard, “Base Period” means the first two full calendar years immediately following the calendar year when the New Freight Rail Yard begins Freight Rail Yard Operations.
- (4) CARGO HANDLING EQUIPMENT (CHE) means any self-propelled vehicle or equipment primarily used onsite at a Freight Rail Yard to lift or move containerized or non-containerized freight, which may include empty containers and chassis, carried to or from the Freight Rail Yard by Drayage Truck, Locomotive, or another vehicle.

- (5) **CLASSIFICATION YARD** means a Freight Rail Yard in which Railcars are classified, separated, grouped or moved with the purpose of transporting Railcars and their containerized or non-containerized freight, which may include empty containers and chassis, to different destinations.
- (6) **CONTRACTUAL AGREEMENT** means a legally enforceable agreement entered into by two or more parties to do, or refrain from doing, one or more actions specified in a written contract, memorandum of understanding, or other binding agreement in relation to the lease, construction, or operation of a Freight Rail Yard.
- (7) **DRAYAGE TRUCK** means any in-use on-road vehicle with a gross vehicle weight rating greater than 26,000 pounds operating at and travelling to and from Freight Rail Yard property, for the purpose of loading, unloading, or transporting containerized and non-containerized freight, which may include empty containers and chassis.
- (8) **FINE PARTICULATE MATTER (PM2.5)** means particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers.
- (9) **FREIGHT RAIL YARD** means any Rail Yard where Switching Activities occur or where containerized or non-containerized freight, which may include empty containers and chassis, are loaded to or unloaded from Railcars for transportation to or from a location outside of the Freight Rail Yard by Locomotive(s) operated by the Freight Rail Yard Operator, including but not limited to Intermodal Rail Yards and Classification Yards.
- (10) **FREIGHT RAIL YARD OPERATIONS** means operations associated with Freight Rail Yards, such as Switching Activities; loading, unloading, moving, and transferring of containerized or non-containerized freight, which may include empty containers and chassis; fueling, maintenance, service, and repair of Locomotives and/or other Applicable Mobile Sources; and other similar operations conducted by a Freight Rail Yard Operator or an entity that is controlled by or is under common control with a Freight Rail Yard Operator.
- (11) **FREIGHT RAIL YARD OPERATOR** means a Railroad that is, controls, or is under common control with the entity who conducts day-to-day business operations at a Freight Rail Yard, either with its employees or through contracting out of services for all or parts of the Freight Rail Yard Operations.

- (12) FREIGHT RAIL YARD OWNER means the legal, beneficial, and/or equitable owner or owners of part or whole of a Freight Rail Yard, which may or may not be a Railroad.
- (13) FUEL TYPE means the fuel used to power a vehicle, including but not limited to electricity, hydrogen, natural gas, gasoline, or diesel fuel.
- (14) INTERMODAL RAIL YARD means any Freight Rail Yard where freight transportation involves two or more different modes of transportation.
- (15) LINE HAUL LOCOMOTIVE means a Locomotive that is powered by an engine with a maximum Rated Power (or combination of engines having a total Rated Power) of greater than 2,300 horsepower.
- (16) LOCOMOTIVE means a self-propelled piece of on-track equipment designed for moving or propelling Railcars that are designed to carry containerized or non-containerized freight, which may include empty containers and chassis, but which itself is not designed or intended to carry freight.
- (17) LOCOMOTIVE ENGINE CERTIFICATION DATA means the duty cycle weighted emission test results after deterioration factor and all other applicable adjustments have been applied, used by the United States Environmental Protection Agency to certify Locomotives.
- (18) MARINE TERMINAL means one or more structures used for the transmission, care, and convenience of cargo or goods in the interchange of same between land and ships or between ships. The structure(s) may comprise of one or more of the following: docks, berths, piers, aprons, wharves, moorings, rail tracks, truck lanes, pipelines, temporary storage spaces, and other structures that are designed for the operation or maintenance of vehicles and equipment used in transporting or assisting in transporting cargo or goods.
- (19) MILESTONE YEAR (MY) means any of the calendar years including the third calendar year immediately after the calendar year when the rule becomes effective and every third calendar year thereafter, except that for a New Freight Rail Yard, a “Milestone Year” means any of these calendar years that does not overlap with its Base Period.
- (20) NEW FREIGHT RAIL YARD means any Freight Rail Yard beginning Freight Rail Yard Operations, or resuming Freight Rail Yard Operations following a Shutdown, on or after the date the rule becomes effective.

- (21) NITROGEN OXIDES (NO_x) mean the sum of nitric oxides and nitrogen dioxides emitted, calculated as nitrogen dioxide, which are a precursor pollutant to the formation of Ozone and PM_{2.5}.
- (22) OTHER ON-SITE SUPPORT EQUIPMENT (OSE) means any mobile source equipment that is assigned to a Freight Rail Yard and takes part in day-to-day Freight Rail Yard Operations that is not a CHE, Drayage Truck, Line Haul Locomotive, Switch Locomotive, or Transportation Refrigeration Unit.
- (23) OZONE means tropospheric or ground-level ozone which is formed in the atmosphere from photochemical reactions between NO_x and volatile organic compounds in the presence of sunlight.
- (24) RAIL YARD means a facility, structure, installation, or real property within the South Coast AQMD jurisdiction that may consist of one or more contiguous properties, the whole or part of which is laid with a system of rail tracks, crossovers, and/or switches that may be connected or adjacent to but are not part of the main line, branch line, or other rail tracks used by Through Traffic, which are in actual physical contact or separated solely by a roadway or other right-of-way, are owned or operated by the same entity or by entities under common control, and where one or more Work Crews are assigned to conduct day-to-day business operations such as Freight Rail Yard Operations.
- (25) RAILCAR means a rail-mounted equipment also known as a “car” designed to carry freight. Railcars may include, but are not limited to, autoracks, boxcars, covered and open-top hoppers, coil cars, flatcars, gondolas, tank cars, intermodal cars, and well cars.
- (26) RAILCAR MOVER means an off-road vehicle fitted with rail couplers and capable of traveling on both roads and rail tracks.
- (27) RAILROAD means a commercial entity that operates Locomotives to transport containerized or non-containerized freight, which may include empty containers and chassis.
- (28) RATED POWER means the maximum brake power point on the nominal power curve for a Locomotive configuration.
- (29) REFERENCE SCENARIO means a scenario of Freight Rail Yard emissions in a Milestone Year absent the In-Use Locomotive Regulation and the Advanced Clean Fleets Regulation in the California Code of Regulations (CCR), and also absent this rule.

- (30) **RESPONSIBLE OFFICIAL** means:
 - (A) For a corporation:
 - (i) President, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or a person who performs similar policy-making functions for the corporation; or
 - (ii) Duly authorized representative provided the representative is responsible for the overall operational control of the Freight Rail Yard, and the Executive Officer has approved a request from the original Responsible Official to delegate this authority.
 - (B) For a partnership or sole proprietorship: general partner or proprietor, respectively.
 - (C) For a municipality, State, federal, or other public agency: a principal executive officer or ranking elected official.
- (31) **SHUTDOWN** means the cessation of all Freight Rail Yard Operations at a Freight Rail Yard for a full calendar year or longer.
- (32) **SWITCH LOCOMOTIVE** or **SWITCHER** means a Locomotive that is powered by an engine with a maximum Rated Power (or combination of engines having a total Rated Power) of 2,300 horsepower or less.
- (33) **SWITCHING ACTIVITY** means classification of Railcars according to cargo or destination; assembling of multiple Railcars into trains and/or adding, removing, or repositioning of a Locomotive or Locomotives for train movements; changing the position of Railcars for purposes of loading, unloading, or weighing; placing of Locomotives and Railcars for repair or storage; or moving of rail equipment in connection with work service. Switching Activities may be performed by a Switch Locomotive, a Line Haul Locomotive, or a Railcar Mover.
- (34) **THROUGH TRAFFIC** means the continuous movement of a train that does not come to a complete stop at a Freight Rail Yard except for safety or emergency considerations.
- (35) **THROUGHPUT** means the total number of visits by Railcars that move through a Freight Rail Yard over a set period of time. A Railcar entering a Freight Rail Yard and then leaving that yard counts as one visit.
- (36) **TRANSPORTATION REFRIGERATION UNIT (TRU)** means any refrigeration system powered by an integrated power source and designed to control the environment of temperature sensitive products transported in trucks, trailers,

containers, or Railcars, from which the TRU may be but is not necessarily detachable.

- (37) TRUCK TRIP means the one-way trip a Drayage Truck makes to or from a Freight Rail Yard to deliver or pick up containerized or non-containerized freight, which may include empty containers and chassis. A Drayage Truck entering a Freight Rail Yard and then leaving that yard counts as two trips.
- (38) WORK CREW means two or more workers who are assigned as a team to perform a common task or multiple common tasks as part of the day-to-day business operations of their employer, or of an entity that contracts with their employer(s) for the latter to provide such services.
- (39) ZERO EMISSION (ZE) CONFIGURATION means an operational mode or condition under which a Locomotive, vehicle, or equipment never emits any criteria pollutant (or precursor pollutant) or toxic pollutant from any onboard source of power at any power setting, including any propulsion power that is connected to and moves with the Locomotive, vehicle, or equipment when it is in motion, or under which a Locomotive, vehicle, or equipment relies solely on grid power when it is connected to the electric grid. A Locomotive, vehicle, or equipment may be but is not necessarily designed to always operate in ZE Configuration.
- (40) ZERO EMISSION (ZE) INFRASTRUCTURE means infrastructure that provides the appropriate Fuel Type or power to support the operation of CHE, Drayage Trucks, Locomotives, TRU, or OSE in ZE Configuration.

(d) Requirements

- (1) For each of its operated Freight Rail Yards, the Freight Rail Yard Operator shall meet or exceed:
 - (A) The NO_x emission reductions target for each Milestone Year, as specified in Table 1 – Emission Reductions Targets for the corresponding calendar year; or
 - (B) The NO_x emission reductions target based on emission reductions occurring during the corresponding Milestone Year from all Freight Rail Yards within the State of California operated by the same Freight Rail Yard Operator, provided that the Freight Rail Yard Operator:
 - (i) Has not been issued a citation, notice of violation, or any equivalent document by the California Air Resource Board

- (CARB) during or prior to the corresponding Milestone Year for noncompliance with the In-Use Locomotive Regulation or the Advanced Clean Fleets Regulation;
- (ii) Submits Freight Rail Yard Operator's statewide data for the corresponding Milestone Year pursuant to subparagraph (f)(1)(H), as an attachment to the corresponding Milestone Compliance Report as specified in paragraph (f)(1); and
 - (iii) Calculates the NOx emission reductions target using Equation 1 and the methodology as specified in Rule 2306 Calculation Methodology and Data Appendix, using the Freight Rail Yard Operator's statewide data for the corresponding Milestone Year pursuant to subparagraph (f)(1)(H).
- (2) The Freight Rail Yard Operator shall demonstrate compliance with the requirements of paragraph (d)(1) in the Milestone Compliance Report as specified in paragraph (f)(1), using Equation 2 and the methodology specified in Rule 2306 Calculation Methodology and Data Appendix.
- (3) For any Freight Rail Yard with an annual average Throughput during a Milestone Year and its two preceding calendar years that is less than the annual average Throughput over the Base Period, the Freight Rail Yard Operator may elect to comply with the following in lieu of paragraph (d)(2):
- (A) Demonstrate in the Milestone Compliance Report as specified in paragraph (f)(1), that the Aggregate Emission Factor for the corresponding Milestone Year as calculated and reported pursuant to subparagraph (f)(1)(E) are less than or equal to the annual average Aggregate Emission Factor as calculated and reported for the Base Period pursuant to subparagraph (e)(1)(E); and
 - (B) Demonstrate compliance with the requirements of paragraph (d)(1) in the Milestone Compliance Report as specified in paragraph (f)(1), using Equation 3 and the methodology specified in Rule 2306 Calculation Methodology and Data Appendix.
- (4) The following reports shall be prepared in the manner specified by the Executive Officer, certified and signed by a Responsible Official of the Freight Rail Yard Owner and/or Freight Rail Yard Operator, as applicable, for the truthfulness,

accuracy, and completeness of its submitted report, and submitted to the Executive Officer:

- (A) Initial Facility Information Report as specified in paragraph (e)(1) shall be:
 - (i) Submitted no later than 90 calendar days after the Base Period ends, or no later than 90 calendar days after a Freight Rail Yard Shutdown date as specified in subparagraph (g)(3)(F), if the Shutdown occurs during the Base Period; and
 - (ii) Prepared and submitted by the current Freight Rail Yard Operator, or if applicable, the former Freight Rail Yard Operator preceding the Shutdown, for each Freight Rail Yard;
- (B) Initial Zero Emission Infrastructure Report as specified in paragraph (e)(2) shall be:
 - (i) Submitted no later than 120 calendar days after the Base Period ends; and
 - (ii) Prepared and submitted by the Freight Rail Yard Owner and Freight Rail Yard Operator, either individually for each Freight Rail Yard or jointly for multiple Freight Rail Yards operated by the same Freight Rail Yard Operator;
- (C) Milestone Compliance Report as specified in paragraph (f)(1) shall be:
 - (i) Submitted no later than July 15 of the calendar year following a Milestone Year, or no later than 90 calendar days after a Freight Rail Yard Shutdown date as specified in subparagraph (g)(3)(F), if the Shutdown occurs during the Milestone Year; and
 - (ii) Prepared and submitted by the current Freight Rail Yard Operator, or if applicable, the former Freight Rail Yard Operator preceding the Shutdown, for each Freight Rail Yard; and
- (D) Zero Emission Infrastructure Status Update Report as specified in paragraph (f)(2) shall be:
 - (i) Submitted no later than October 15 of the calendar year following a Milestone Year; and
 - (ii) Prepared and submitted by the Freight Rail Yard Owner and Freight Rail Yard Operator, either individually for each Freight

Rail Yard or jointly for multiple Freight Rail Yards operated by the same Freight Rail Yard Operator.

- (5) The Freight Rail Yard Owner or Operator shall submit a request to the local electrical utility to upgrade the electrical service no later than 180 calendar days after the submittal of the Initial Zero Emission Infrastructure Report as specified in paragraph (e)(2) or the Zero Emission Infrastructure Status Update Report as specified in paragraph (f)(2), if the Freight Rail Yard Owner or Operator identifies in such reports the need to upgrade the electrical service provided to the Freight Rail Yard.
 - (6) In the event there is a change of Freight Rail Yard Operator, the new Freight Rail Yard Operator pursuant to paragraph (g)(1) shall obtain the following information and records:
 - (A) All required information pursuant to paragraphs (e)(1) and (e)(2) for the Base Period, and paragraphs (f)(1) and (f)(2) for the most recent Milestone Year before the date of change of operator (if applicable) and the next Milestone Year; and
 - (B) All records pursuant to subdivision (h).
 - (7) In the event there is a change of Freight Rail Yard Owner, the new Freight Rail Yard Owner pursuant to paragraph (g)(2) shall obtain the following information and records:
 - (A) All required information pursuant to paragraph (e)(2) for the Base Period, and paragraph (f)(2) for the most recent Milestone Year before the date of change of ownership (if applicable) and the next Milestone Year; and
 - (B) All records pursuant to subdivision (h).
 - (8) In the event there is a Freight Rail Yard Shutdown, the Freight Rail Yard Owner shall obtain the following information and records:
 - (A) All required information pursuant to paragraph (e)(2) for the Base Period, and paragraph (f)(2) for the most recent Milestone Year before the Shutdown date as specified in subparagraph (g)(3)(F) (if applicable) and the next Milestone Year; and
 - (B) All records pursuant to subdivision (h).
- (e) Initial Reports
- (1) Initial Facility Information Report

The Freight Rail Yard Operator required to submit an Initial Facility Information Report pursuant to paragraph (d)(4) and subparagraph (d)(4)(A) shall include in the report the following information about the Base Period:

- (A) Freight Rail Yard information as specified in Table 2 – Freight Rail Yard Information;
- (B) Applicable Mobile Sources information as specified in Table 3 – Applicable Mobile Sources Information for each Locomotive, Drayage Truck, TRU, and each unit of CHE and OSE operating at and travelling to and from the Freight Rail Yard;
- (C) Total number of calendar days within a calendar year when Switching Activities occur at the Freight Rail Yard, for each calendar year of the Base Period, and the annual average over the Base Period;
- (D) Annual Throughput of the Freight Rail Yard for each calendar year of the Base Period, and the annual average Throughput over the Base Period; and
- (E) Annual Aggregate Emission Factors for each calendar year of the Base Period, and the annual average over the Base Period, along with detailed steps of the calculations using the methodology specified in Rule 2306 Calculation Methodology and Data Appendix.

(2) Initial Zero Emission Infrastructure Report

The Freight Rail Yard Owner and Freight Rail Yard Operator required to submit an Initial Zero Emission Infrastructure Report pursuant to paragraph (d)(4) and subparagraph (d)(4)(B) shall:

- (A) Specify in the report any on-site and off-site ZE Infrastructure that has previously been designed, developed, or installed to support the Freight Rail Yard Owner's and/or the Freight Rail Yard Operator's compliance with the In-Use Locomotive Regulation, to support the implementation of the Advanced Clean Fleets Regulation, and/or any other ZE infrastructure requirements and initiatives;
- (B) Specify in the report any future on-site and off-site ZE infrastructure that will be needed for the Freight Rail Yard Owner and/or the Freight Rail Yard Operator to fully comply with the In-Use Locomotive Regulation, and/or to support the implementation of the Advanced Clean Fleets Regulation, and the control measures for TRUs and CHE as specified in the 2022 State Strategy for the State Implementation Plan; and

- (C) Include in the report the following information over the Base Period:
 - (i) Description of installed and operative ZE Infrastructure pursuant to subparagraph (e)(2)(A), including the information as specified in Table 4 – Information on Installed and Operative ZE Infrastructure;
 - (ii) Description of ongoing ZE Infrastructure currently under design and development, at time of report submittal, pursuant to subparagraph (e)(2)(A), including the information as specified in Table 5 – Information on ZE Infrastructure in Development; and
 - (iii) Description of the planning of future on-site and off-site ZE infrastructure, at time of report submittal, needed to meet expected energy demand from regulations and plans pursuant to subparagraph (e)(2)(B), including the information as specified in Table 6 – Information on Future ZE Infrastructure Being Planned.

(f) Milestone Year Reports

(1) Milestone Compliance Report

The Freight Rail Yard Operator required to submit a Milestone Compliance Report pursuant to paragraph (d)(4) and subparagraph (d)(4)(C) shall include in the report the following information:

- (A) Any changes in Freight Rail Yard information compared to the Initial Facility Information Report previously submitted pursuant to subparagraph (e)(1)(A), or compared to the most recent Milestone Compliance Report pursuant to this subparagraph;
- (B) Applicable Mobile Sources information as specified in Table 3, for each Locomotive and Drayage Truck, and if applicable pursuant to paragraph (d)(2), for each TRU and each unit of CHE and OSE operating at and travelling to and from the Freight Rail Yard during the corresponding Milestone Year;
- (C) Total number of calendar days within a calendar year when Switching Activities occur at the Freight Rail Yard, for the corresponding Milestone Year and each of its two preceding calendar years, and the annual average over these three calendar years;

- (D) Annual Throughput of the Freight Rail Yard for the corresponding Milestone Year and each of its two preceding calendar years, and the annual average over these three calendar years;
 - (E) Annual Aggregate Emission Factor for the corresponding Milestone Year, along with detailed steps of the calculations using the methodology specified in Rule 2306 Calculation Methodology and Data Appendix, if the Freight Rail Yard Operator elects to comply with the requirements in paragraph (d)(3) in lieu of paragraph (d)(2);
 - (F) Emission reductions target
 - (i) Emission reductions target elected by the Freight Rail Yard Operator for the corresponding Milestone Year pursuant to paragraph (d)(1); and
 - (ii) If the alternative emission reductions target is elected pursuant to subparagraph (d)(1)(B):
 - (A) Attestation of the Freight Rail Yard Operator’s eligibility for electing the alternative target pursuant to clause (d)(1)(B)(i); and
 - (B) Detailed steps of the calculations pursuant to clause (d)(1)(B)(iii), to demonstrate the determination of the alternative emission reductions target;
 - (G) Demonstration of compliance with the requirements specified in paragraph (d)(1), by including detailed steps of the calculations pursuant to paragraph (d)(2), or paragraph (d)(3) if applicable, for the corresponding Milestone Year; and
 - (H) Attachment: Statewide Data

All applicable information as specified in Table 3 for each Locomotive and Drayage Truck operating at and travelling to and from any of the Freight Rail Yards within the State of California that are operated by the same Freight Rail Yard Operator during the corresponding Milestone Year, if the alternative emission reductions target is elected pursuant to subparagraph (d)(1)(B) and specified pursuant to subparagraph (f)(1)(F).
- (2) Zero Emission Infrastructure Status Update Report

The Freight Rail Yard Owner and Freight Rail Yard Operator required to submit a Zero Emission Infrastructure Status Update Report pursuant to paragraph (d)(4) and subparagraph (d)(4)(D) shall:

- (A) Specify in the report any on-site and off-site ZE Infrastructure that has been designed, developed, or installed since submittal of the Initial Zero Emission Infrastructure Report or the most recent Zero Emission Infrastructure Status Update Report, whichever is later, to support the Freight Rail Yard Owner's and/or the Freight Rail Yard Operator's compliance with the In-Use Locomotive Regulation, to support the implementation of the Advanced Clean Fleets Regulation and/or any other ZE infrastructure requirements and initiatives;
 - (B) Specify in the report any updates to the future needs of on-site and off-site ZE infrastructure pursuant to subparagraph (e)(2)(B);
 - (D) Include in the report the following information for the Milestone Year:
 - (i) Description of ZE Infrastructure installed and operative after submittal of the Initial Zero Emission Infrastructure Report or the most recent Zero Emission Infrastructure Status Update Report, whichever is later, pursuant to subparagraph (f)(2)(A), including the information as specified in Table 4;
 - (ii) Description of new or ongoing ZE Infrastructure currently under design and development, at time of report submittal, pursuant to subparagraph (f)(2)(A), including the information as specified in Table 5; and
 - (iii) Description of any updates to the planning of future on-site and off-site ZE infrastructure, at time of report submittal, to meet expected energy demand from regulations and plans pursuant to subparagraph (f)(2)(B), including the information as specified in Table 6.
- (g) Notifications
- (1) Change of Freight Rail Yard Operator Notification
 - (A) No later than 30 calendar days before a change of operator, the owner or current operator of the Freight Rail Yard shall submit a notification to the Executive Officer including the following information:
 - (i) Current Name of the Freight Rail Yard;

- (ii) Address of the Freight Rail Yard;
 - (iii) Current Freight Rail Yard Operator;
 - (iv) New Freight Rail Yard Operator;
 - (v) Date of change of operator; and
 - (vi) Any other anticipated changes in Freight Rail Yard information upon or after change of operator, compared to the Initial Facility Information Report pursuant to subparagraph (e)(1)(A), or compared to the most recent Milestone Compliance Report pursuant to subparagraph (f)(1)(A).
- (B) No later than 30 calendar days after a change of operator, the new operator of the Freight Rail Yard shall submit a secondary notification to the Executive Officer including the following information:
 - (i) Whether the information submitted pursuant to subparagraph (g)(1)(A) remains accurate; and
 - (ii) Any necessary updates to the information submitted pursuant to subparagraph (g)(1)(A).
- (2) Change of Freight Rail Yard Owner Notification
 - (A) No later than 30 calendar days before a change of ownership, the current owner or operator of the Freight Rail Yard shall submit a notification to the Executive Officer including the following information:
 - (i) Current Name of the Freight Rail Yard;
 - (ii) Address of the Freight Rail Yard;
 - (iii) Current Freight Rail Yard Owner;
 - (iv) New Freight Rail Yard Owner;
 - (v) Date of ownership change; and
 - (vi) Any other anticipated changes in Freight Rail Yard information upon or after change of ownership, compared to the Initial Facility Information Report pursuant to subparagraph (e)(1)(A), or compared to the most recent Milestone Compliance Report pursuant to subparagraph (f)(1)(A).
 - (B) No later than 30 calendar days after a change of owner, the new owner of the Freight Rail Yard shall submit a secondary notification to the Executive Officer including the following information:

- (i) Whether the information submitted pursuant to subparagraph (g)(2)(A) remains accurate; and
 - (ii) Any necessary updates to the information submitted pursuant to subparagraph (g)(2)(A).
- (3) **Freight Rail Yard Shutdown Notification**

No later than 30 calendar days before the Freight Rail Yard Shutdown date, the Freight Rail Yard Owner or Operator shall submit a notification to the Executive Officer including the following information:

 - (A) Name of the Freight Rail Yard;
 - (B) Address of the Freight Rail Yard;
 - (C) Current Freight Rail Yard Owner;
 - (D) Current Freight Rail Yard Operator;
 - (E) Reason for Shutdown;
 - (F) Date of Freight Rail Yard Shutdown; and
 - (G) Anticipated Date to resume Freight Rail Yard Operations, if applicable.
- (4) **Exceedance of Low Activity Exemption Threshold Notification**

No later than January 31 of the calendar year after a Freight Rail Yard exceeds the annual Switching Activity threshold as specified in paragraph (j)(1), the Freight Rail Yard Operator shall submit a notification to the Executive Officer including the following information:

 - (A) Name of the Freight Rail Yard;
 - (B) Address of the Freight Rail Yard; and
 - (C) Total number of calendar days within the immediately preceding calendar year when Switching Activities occur at the Freight Rail Yard.
- (5) **Proposed Freight Rail Yard Construction, Conversion, or Expansion Notification**

No later than 365 calendar days prior to the construction of or conversion into a New Freight Rail Yard or the expansion of an existing Freight Rail Yard, or as soon as practicable if such construction, conversion, or expansion occurs within 365 calendar days from the date the rule becomes effective, the Freight Rail Yard Owner shall submit a notification to the Executive Officer including the following information:

- (A) Proposed project type, including construction of a New Freight Rail Yard, conversion of an existing Rail Yard into a New Freight Rail Yard, or expansion of an existing Freight Rail Yard;
- (B) Name of the proposed project, if applicable;
- (C) Location of the proposed project;
- (D) Freight Rail Yard Owner;
- (E) Anticipated Freight Rail Yard Operator; and
- (F) Estimated date when the proposed project site will begin Freight Rail Yard Operations.

(h) Recordkeeping

The Freight Rail Yard Owner or Operator shall keep the records and documentations that support the accuracy and validity of all information reported and submitted to the Executive Officer pursuant to subdivisions (d) through (g), as applicable, for a minimum of seven years from the submittal deadline and make the records and documents available to the Executive Officer upon a written request.

(i) Agency Responsibility

Any state or local government agency or any non-federal public agency or combination of public agencies such as a joint powers authority who enters, renews, or amends a Contractual Agreement, which is separately enforceable independent of this rule and the California Environmental Quality Act, shall include in such Contractual Agreement(s) provision(s) that have the effect of requiring that the applicable countersigned party or parties, unless exempt from some or all requirements of this rule pursuant to subdivision (j), must comply with the following requirements of this rule as applicable:

- (1) Compliance with emissions reduction targets as specified in paragraphs (d)(1) through (d)(3);
- (2) Timely and complete submittal of the following reports and notifications:
 - (A) Initial Facility Information Report as specified in subparagraph (d)(4)(A) and paragraph (e)(1);
 - (B) Initial Zero Emission Infrastructure Report as specified in subparagraph (d)(4)(B) and paragraph (e)(2);
 - (C) Milestone Compliance Report as specified in subparagraph (d)(4)(C) and paragraph (f)(1);

- (D) Zero Emission Infrastructure Status Update Report as specified in subparagraph (d)(4)(D) and paragraph (f)(2);
 - (E) Change of Freight Rail Yard Operator Notification as specified in paragraph (g)(1);
 - (F) Change of Freight Rail Yard Owner Notification as specified in paragraph (g)(2);
 - (G) Freight Rail Yard Shutdown Notification as specified in paragraph (g)(3);
 - (H) Exceedance of Low Activity Exemption Threshold Notification as specified in paragraph (g)(4); and
 - (I) Proposed Freight Rail Yard Construction, Conversion, or Expansion Notification as specified in paragraph (g)(5);
- (3) Recordkeeping as specified in subdivision (h);
 - (4) Request to the local electrical utility to upgrade the electrical service, if applicable, as specified in paragraph (d)(5); and
 - (5) Obtaining applicable information and records as specified in paragraphs (d)(6) through (d)(8) in the event of a change in Freight Rail Yard Operator, a change in Freight Rail Yard Owner, or a Freight Rail Yard Shutdown.
- (j) Exemptions
- (1) The Freight Rail Yard Owner or Operator is not subject to the requirements in paragraphs (d)(1) through (d)(3), subparagraphs (d)(4)(C) through (d)(4)(D), paragraph (d)(5), and subdivision (f) of this rule for any of its owned- or operated-Freight Rail Yards that is not an Intermodal Rail Yard and where Switching Activities occur no more than 30 calendar days per year within a Milestone Year and any of the two preceding calendar years.
 - (2) The City of Long Beach, the City of Los Angeles, and/or any third party under contractual operating agreement(s) with the City of Long Beach and/or the City of Los Angeles are not subject to the requirements of this rule for any of its owned- or operated-Freight Rail Yard that meets one of the following:
 - (A) An Intermodal Rail Yard located on dock at a Marine Terminal that is wholly or partially located within the Long Beach Harbor District or the Los Angeles Harbor District (Harbor Districts); or

- (B) A Freight Rail Yard that is not an Intermodal Rail Yard and where the Freight Rail Yard Operations are solely for the purpose of moving Railcars to and/or from Marine Terminal(s) that are wholly or partially located within the Harbor Districts.

(k) Effective Date

The provisions of this rule are effective on the latest of:

- (1) The date the United States Environmental Protection Agency takes final action approving inclusion of the rule in the California State Implementation Plan;
- (2) The date the United States Environmental Protection Agency grants an authorization under the Clean Air Act Section 209(e)(2) to the California In-Use Locomotive Regulation (CCR, Title 13, Sections 2478 through 2478.17); and
- (3) The date the United States Environmental Protection Agency grants a waiver under the Clean Air Act Section 209(b) and/or an authorization under the Clean Air Act Section 209(e)(2) to the California Advanced Clean Fleets Regulation either as a whole (CCR, Title 13, Sections 2013 through 2013.4, 2014 through 2014.3, 2015 through 2015.6, and 2016), or in part for its Drayage Truck Requirements (CCR, Title 13, Sections 2014 through 2014.3).

(l) Severability

- (1) If any provision of this rule is held by judicial order to be unlawful or otherwise invalid, such order shall not affect the operation or implementation of the remainder of this rule.
- (2) If any provision of this rule is held by judicial order to be inapplicable to any person or circumstance, such order shall not affect the application of such provision to other persons or circumstances.
- (3) If a federal court stays, invalidates, or delays, in whole or in part, federal approval of inclusion of this rule in the California State Implementation Plan, the provisions of this rule shall be enforceable only to the extent they are not stayed or invalidated.

Table 1 – NO_x Emission Reductions Targets

Calendar Year	Percent Emission Reductions Targets (%)
2027	9.2
2028	13.6
2029	16.9
2030	56.5
2031	61.0
2032	61.7
2033	62.3
2034	62.2
2035	71.6
2036	76.3
2037	82.4
2038	81.8
2039	81.3
2040	80.7
2041	80.0
2042	79.0
2043	77.8
2044	76.4
2045	76.0
2046	75.6
2047	74.6
2048	74.9
2049	75.7
2050	76.5

Table 2 – Freight Rail Yard Information

Information Type	Information Description
REQUIRED	<ul style="list-style-type: none"> <li data-bbox="418 369 954 405">(i) Name of the Freight Rail Yard <li data-bbox="418 426 980 462">(ii) Address of the Freight Rail Yard <li data-bbox="418 483 1224 518">(iii) Footprint of the Freight Rail Yard in square footage <li data-bbox="418 539 1365 623">(iv) Map of the Freight Rail Yard and the immediately surrounding public roadway and/or public right-of-way <li data-bbox="418 644 883 680">(v) Freight Rail Yard Owner <li data-bbox="418 701 909 737">(vi) Freight Rail Yard Operator <li data-bbox="418 758 1365 842">(vii) Duration of Contractual Agreement between Freight Rail Yard Owner and Freight Rail Yard Operator (if applicable) <li data-bbox="418 863 1349 947">(viii) Name and contact information for Responsible Official of the Freight Rail Yard Operator <li data-bbox="418 968 1300 1003">(ix) Whether the Freight Rail Yard is an Intermodal Rail Yard

Table 3 – Applicable Mobile Sources Information

Information Type	Information Description
Locomotive	
REQUIRED	<ul style="list-style-type: none"> (i) Locomotive road number (ii) Locomotive serial number (iii) Engine tier (iv) Engine power rating in horsepower (v) Original engine build date (vi) Latest remanufacture date (vii) Total number of days within a calendar year operating at and travelling to and from the Freight Rail Yard (viii) Annual usage per within the South Coast AQMD jurisdiction in megawatt-hours (ix) Annual usage in ZE Configuration within the South Coast AQMD jurisdiction in megawatt-hours (if applicable) (x) Annual fuel consumption by Fuel Type (if used to estimate annual usage) <p><i>Information items (xi) through (xiii) in this table shall only be submitted for the purpose of statewide data reporting pursuant to subparagraph (f)(1)(H) in lieu of information items (vii) through (x) in this table.</i></p> <ul style="list-style-type: none"> (xi) Annual usage in California in megawatt-hours (xii) Annual usage in ZE Configuration in California in megawatt-hours (if applicable) (xiii) Annual fuel consumption by Fuel Type (if used to estimate annual usage) (xiv) Certification showing Locomotive Engine Certification Data value(s) for NOx (if used to demonstrate compliance pursuant to paragraph (d)(2) or subparagraph (d)(3)(B))

Table 3 – Applicable Mobile Sources Information (Cont.)

Information Type	Information Description	
Locomotive (Cont.)		
OPTIONAL	(xv)	Locomotive model number
	(xvi)	Engine serial number
	(xvii)	Engine family
	(xviii)	Engine manufacturer name
	(xix)	Date acquired
Drayage Truck		
REQUIRED	(xx)	Vehicle Identification Number
	(xxi)	License plate number and state of issuance
	(xxii)	Total number of unique entry date(s) per Freight Rail Yard
OPTIONAL	(xxiii)	Actual average vehicle miles traveled per Truck Trip
TRU		
REQUIRED*	(xxiv)	Serial number
	(xxv)	CARB identification number (IDN) (if applicable)
	(xxvi)	TRU type
	(xxvii)	Estimated annual operating hours within the South Coast AQMD jurisdiction associated with visit(s) to the Freight Rail Yard**
	(xxviii)	Estimated annual operating hours in ZE Configuration within the South Coast AQMD jurisdiction associated with visit(s) to the Freight Rail Yard (if applicable)**
	(xxix)	Total number of days within a calendar year operating at and travelling to and from the Freight Rail Yard
OPTIONAL	(xxx)	Maximum rated horsepower
	(xxx1)	Model year
	(xxx2)	Fuel type(s)

* if applicable pursuant to (e)(1) or (f)(1)

** Using the estimation methodology provided in Rule 2306 Calculation Methodology and Data Appendix

Table 3 – Applicable Mobile Sources Information (Cont.)

Information Type	Information Description
CHE and OSE	
REQUIRED*	<p>(xxxiii) Equipment type</p> <p>(xxxiv) Make and model</p> <p>(xxxv) Engine tier</p> <p>(xxxvi) Fuel Type(s)</p> <p>(xxxvii) Maximum rated horsepower</p> <p>(xxxviii) Annual operating hours at the Freight Rail Yard</p> <p style="text-align: center;"><i>Annual operating hours shall be reported using the operational information pursuant to the following order of hierarchy, if available, consistently for Initial Facility Information Report and all Milestone Compliance Reports for the same unit of CHE or OSE.</i></p> <p>(A) Annual operating hours recorded using a non-resettable hour-meter</p> <p>(B) Annual operating hours recorded in equipment maintenance records</p> <p>(C) Calculated annual operating hours using equipment operational data (including, but not limited to, fuel consumption, fuel type, equipment rated horsepower, equipment load factor)</p> <p>(xxxix) Annual operating hours in ZE Configuration at the Freight Rail Yard (if applicable)</p>

* if applicable pursuant to (e)(1) or (f)(1)

Table 4 – Information on Installed and Operative ZE Infrastructure

Information Description	
(A)	List of installed and operative projects, including the project’s individual components such as, but not limited to, fuel dispensers (stationary or mobile), fuel reformers, electrolyzers, fuel compressors, fuel transportation pipelines and related components, electric chargers, conduits, transformers, substations, and any on-site or near-site power generation and energy storage components
(B)	Description of each project, including but not limited to Fuel Type and maximum energy capacity
(C)	Date of complete installation (inclusive of any required inspection) for each project
(D)	Date of beginning operation for each project (if different than the date of completed installation)
(E)	Documentation from responsible party or parties certifying completion of installation for each project
(F)	Name(s) of energy provider(s), such as utilities and fuel suppliers
(G)	Name(s) of infrastructure operator(s), if different from energy provider(s)
(H)	Annual usage of each Fuel Type for the ZE Infrastructure that has been installed and operative to date

Table 5 – Information on ZE Infrastructure in Development

Information Description	
(A)	List of projects under design and development, including the project’s individual components such as, but not limited to, fuel dispensers (stationary or mobile), fuel reformers, electrolyzers, fuel compressors, fuel transportation pipelines and related components, electric chargers, conduits, transformers, substations, and any on-site or near-site power generation and energy storage components
(B)	Description of each project, including but not limited to Fuel Type and maximum energy capacity
(C)	Name(s) of responsible party or parties for the design, planning, development, or installation of each project
(D)	Anticipated dates of installation milestones for each project
(E)	Documentation from the Freight Rail Yard Owner or Freight Rail Yard Operator to the local electrical utility for any request to upgrade the electrical service, as well as the response(s) from the utility estimating the amount of time it will take to provide the upgrade, if applicable and has not been previously submitted to Executive Officer
(F)	Most updated documentation from responsible party or parties of agreement for each project with an estimated date or date range of complete installation (inclusive of any required inspection) for Fuel Types other than electricity, if applicable and has not been previously submitted to Executive Officer

Table 6 – Information on Future ZE Infrastructure Being Planned

Information Description	
(A)	Current Freight Rail Yard energy consumption by Applicable Mobile Sources equipment category
(B)	Estimated range of percent energy consumption pursuant to information item (A) of this table, to be supplied by ZE infrastructure by Fuel Type
(C)	Initial assessment of the need to upgrade the electrical service provided to the Freight Rail Yard based on information item (B) of this table and any other supplemental information
(D)	Name(s) of responsible party or parties for future planning, design, or development of infrastructure, if available

Appendix – Rule 2306 Equations

Section 1: Alternative Milestone Year Emission Reductions Target

Freight Rail Yard Operator shall calculate the alternative Milestone Year emission reductions target pursuant to subparagraph (d)(1)(B), using the following equation:

$$ER_{Statewide}^{MY} = \left(1 - \frac{\sum_y CAFRYEm_y^{MY}}{\sum_y CAFRYEm_{RS,y}^{MY}} \right) \times 100 \quad (Equation 1)$$

Where:

$ER_{Statewide}^{MY}$ = Percent emission reductions achieved for all Freight Rail Yards within the State of California that are operated by the same Freight Rail Yard Operator compared to the Reference Scenario (RS) for Milestone Year MY

$CAFRYEm_y^{MY}$ = Sum of actual NOx emissions from all Locomotives and Drayage Trucks operating at and travelling to and from any Freight Rail Yard y within the State of California that is operated by the same Freight Rail Yard Operator in Milestone Year MY , as calculated using Rule 2306 Calculation Methodology and Data Appendix

$CAFRYEm_{RS,y}^{MY}$ = Sum of NOx emissions from all Locomotives and Drayage Trucks operating at and travelling to and from any Freight Rail Yard y within the State of California that is operated by the same Freight Rail Yard Operator in Milestone Year MY under Reference Scenario (RS), as calculated using Rule 2306 Calculation Methodology and Data Appendix

Section 2: Percent NOx Emission Reductions for Milestone Year

Freight Rail Yard Operator shall calculate the percent NOx emission reductions of the Freight Rail Yard for any Milestone Year pursuant to paragraph (d)(2), using the following equation:

$$ER_{Achieved}^{MY} = \left(1 - \frac{FRYEm^{MY} - OER^{MY}}{FRYEm_{RS}^{MY}} \right) \times 100 \quad (Equation 2)$$

Where:

$ER_{Achieved}^{MY}$ = Percent emission reductions achieved for the Freight Rail Yard for Milestone Year MY , compared to the Reference Scenario (RS)

$FRYEm^{MY}$ = Sum of actual NOx emissions from all Locomotives and Drayage Trucks operating at and travelling to and from the Freight Rail Yard in Milestone Year MY , as calculated using Rule 2306 Calculation Methodology and Data Appendix

$FRYEm_{RS}^{MY}$ = Sum of NOx emissions from all Locomotives and Drayage Trucks operating at and travelling to and from the Freight Rail Yard in Milestone Year MY under Reference Scenario (RS), as calculated using Rule 2306 Calculation Methodology and Data Appendix

OER^{MY} = Sum of actual NOx emission reductions from other Applicable Mobile Sources operating at and travelling to and from the Freight Rail Yard in Milestone Year MY , including TRUs, CHE, and OSE, compared to NOx emissions from the same equipment category in Milestone Year MY under Reference Scenario (RS), using the following equation:

$$OER^{MY} = (ETRU_{RS}^{MY} + ECHE_{RS}^{MY} + EOSE_{RS}^{MY}) - (ETRU^{MY} + ECHE^{MY} + EOSE^{MY})$$

(Equation 2.a)

Where:

$ETRU_{RS}^{MY}$ = Sum of Reference Scenario (RS) NOx emissions from all TRUs operating at and travelling to and from the Freight Rail Yard in Milestone Year MY , as calculated using Rule 2306 Calculation Methodology and Data Appendix

$ECHE_{RS}^{MY}$ = Sum of Reference Scenario (RS) NOx emissions from all CHE operating at and travelling to and from the Freight Rail Yard in Milestone Year MY , as calculated using Rule 2306 Calculation Methodology and Data Appendix

$EOSE_{RS}^{MY}$ = Sum of Reference Scenario (RS) NOx emissions from all OSE operating at and travelling to and from the Freight Rail Yard in Milestone Year MY , as calculated using Rule 2306 Calculation Methodology and Data Appendix

$ETRU^{MY}$ = Sum of actual NOx emissions from all TRUs operating at and travelling to and from the Freight Rail Yard in Milestone Year MY , as calculated using Rule 2306 Calculation Methodology and Data Appendix

$ECHE^{MY}$ = Sum of actual NOx emissions from all CHE operating at and travelling to and from the Freight Rail Yard in Milestone Year MY , as calculated using Rule 2306 Calculation Methodology and Data Appendix

$EOSE^{MY}$ = Sum of actual NOx emissions from all OSE operating at and travelling to and from the Freight Rail Yard in Milestone Year MY , as calculated using Rule 2306 Calculation Methodology and Data Appendix

Section 3: Percent NOx Emission Reductions Between a Milestone Year and the Base Period

Freight Rail Yard Operator shall calculate the percent NOx emission reductions of the Freight Rail Yard between a Milestone Year and the Base Period pursuant to paragraph (d)(3), using the following equation:

$$ER_{Achieved}^{MYBP} = \left(1 - \frac{FRYEm_{AMS}^{MY}}{FRYEm_{AMS}^{BP}} \right) \times 100 \quad (Equation 3)$$

Where:

$ER_{Achieved}^{MYBP}$ = Percent emission reductions achieved for the Freight Rail Yard for Milestone Year MY , compared to the Base Period (BP)

$FRYEm_{AMS}^{MY}$ = Sum of actual NOx emissions from Applicable Mobile Sources (AMS) operating at and travelling to and from the Freight Rail Yard in Milestone Year MY , as calculated using Rule 2306 Calculation Methodology and Data Appendix

$FRYEm_{AMS}^{BP}$ = Annual average of the respective sums of actual NOx emissions from Applicable Mobile Sources (AMS) operating at and travelling to and from the Freight Rail Yard in each calendar year of the Base Period (BP), as calculated using Rule 2306 Calculation Methodology and Data Appendix