(Board Consideration October 3, 2023) Version: Initial Draft

PROPOSED RULE 2306 INDIRECT SOURCE RULE FOR NEW INTERMODAL RAIL YARDS

(a) Purpose

The purpose of this rule is to reduce local and regional emissions of nitrogen oxides (NO_x) and particulate matter (PM), and to facilitate local and regional emission reductions associated with new intermodal facilities and the mobile sources attracted to new intermodal facilities in order to assist in meeting state and federal air quality standards for ozone and fine particulate matter.

(b) Applicability

This rule applies to any owner, operator, or landowner of a new intermodal rail yard located in the South Coast Air Quality Management District (South Coast AQMD) jurisdiction, and any state or local government agency who enters into a Contractual Agreement that includes the construction of a new intermodal rail yard and/or the operation of intermodal activities at a new intermodal rail yard.

(c) Definitions

- (1) CARGO HANDLING EQUIPMENT means any off-road, self-propelled vehicle or equipment used at an intermodal rail yard to lift or move container, bulk, or liquid cargo carried by drayage truck, train, or another vehicle. Equipment includes, but is not limited to, gantry cranes, yard trucks, top handlers, side handlers, reach stackers, forklifts, loaders, aerial lifts, excavators, and dozers.
- (2) CLASS I FREIGHT RAILROAD means a Class I railroad, as classified by the Surface Transportation Board in 49 CFR Part 1201 Subpart A, that primarily transports freight rather than passengers.
- (3) CLASSIFICATION YARD means any rail yard owned or operated by a Class I freight railroad dedicated to separating railcars from inbound trains and reassembling railcars into complete outbound trains.
- (4) CONTRACTUAL AGREEMENT means a legally-enforceable agreement entered into by two or more parties to do, or refrain from doing, one or more things specified in a written contract, memorandum of understanding, or other binding agreement.

- (5) DIESEL PARTICULATE MATTER (DPM) means the particles found in the exhaust of diesel fueled internal combustion engines. DPM is a component of fine particulate matter.
- (6) DRAYAGE TRUCKS means any in-use on-road vehicle with a gross vehicle weight rating (GVWR) of 33,001 pounds or greater operating on or transgressing through intermodal rail yard property for the purpose of loading, unloading or transporting cargo, including but not limited to containerized, bulk, or break-bulk goods.
- (7) FACILITY WIDE EMISSIONS LIMIT means the maximum permissible annual amount of onsite and offsite mass emissions associated with the operation of a rail yard across all mobile sources of emissions.
- (8) FINE PARTICULATE MATTER means any particulate matter with an aerodynamic diameter smaller than or equal to 2.5 microns (PM2.5).
- (9) FUEL TYPE means the fuel used to power a vehicle, such as electricity, hydrogen, natural gas, gasoline, or diesel fuel.
- (10) INTERMODAL means the method of cargo transport involving two or more different modes of transportation.
- (11) INTERMODAL ACTIVITIES means operations at an intermodal rail yard related to the transfer of cargo containers or cargo, including but not limited to containerized, bulk, or break-bulk goods.
- (12) INTERMODAL RAIL YARD means any rail yard owned or operated by a Class I freight railroad where cargo is transferred from drayage truck to train or vice versa.
- (13) INTERMODAL RAIL YARD OWNER means the legal, beneficial, and/or equitable owner or owners of part or whole of an intermodal rail yard. An intermodal rail yard owner can be but is not necessarily the intermodal rail yard operator as defined in paragraph (c)(14).
- (14) INTERMODAL RAIL YARD OPERATOR means the entity who conducts day-to-day operations at an intermodal rail yard, either with its employees or through the contracting out of services for all or part of the intermodal rail yard operations. An intermodal rail yard operator can be, but is not necessarily the intermodal rail yard owner as defined in paragraph (c)(13).

- (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 cars that are designed to carry freight, but which itself is not designed or intended to carry freight.
- (17) MAINTENANCE YARD means any rail yard owned or operated by a Class I freight railroad dedicated to the maintenance of locomotives and/or railcars.
- (18) NEW INTERMODAL RAIL YARD means any rail yard beginning intermodal activities on or after [Date of Rule Adoption] as an intermodal rail yard including but not limited to a newly constructed intermodal rail yard or a newly converted intermodal rail yard from an existing rail yard previously not used for intermodal activities.
- (19) NITROGEN OXIDES (NOx) mean the sum of nitric oxides and nitrogen dioxides emitted, calculated as nitrogen dioxide.
- (20) RAIL YARD means a source or grouping of sources or other air contaminantemitting activities where railroad operations and associated railroad activities occur that are located on one or more contiguous properties within the Basin in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same entity (or by entities under the same control).
- (21) **RESPONSIBLE OFFICIAL means:**
 - (A) for a corporation: .
 - a 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) a duly authorized representative provided the representative is responsible for the overall operational control of the new intermodal rail yard, and the Executive Officer has approved a

petition 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.
- (22) 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.
- (23) TRANSPORT REFRIGERATION UNIT (TRU) means a refrigeration system designed to control the environment of temperature sensitive products transported in trucks, trailers, or rail cars powered by an integrated power source.
- (24) TRUCK TRIP means the one-way trip a drayage truck makes to or from an intermodal rail yard to deliver or pick up cargo or cargo containers. A drayage truck entering an intermodal rail yard and then leaving that site counts as two trips.
- (25) VEHICLE MILES TRAVELED (VMT) means total miles of vehicle travel during the same calendar year.
- (26) YARD TRUCK means an off-road mobile utility vehicle used to carry cargo containers with or without chassis; also known as a utility tractor rig, yard tractor, yard goat, yard hustler, or prime mover.
- (27) ZERO-EMISSION INFRASTRUCTURE means infrastructure that provides the appropriate fuel type or power to support the operation of a ZE locomotive, cargo handling equipment, TRU, or drayage truck. ZE Infrastructure shall not use a local (on-site or near-site) combustion engine or combustion generator for main power or for backup power.
- (28) ZERO-EMISSION (ZE) LOCOMOTIVE means any locomotive that never emits any criteria, toxic pollutant, or greenhouse gas from any onboard source of power at any setting, including any propulsion power that is connected to and moves with the locomotive when it is in motion.
- (29) ZERO-EMISSION (ZE) TRUCK has the same meaning as "zero-emission vehicle" defined in California Code of Regulations, Title 13, Section 1963.

- (d) Requirements
 - (1) The operator of a new intermodal rail yard shall comply with the Facility Wide Emissions Limit calculated in subparagraph (d)(1)(A) and demonstrate compliance annually with methods specified in subparagraph (d)(1)(B).
 - (A) Facility Wide Emissions Limit for a new intermodal rail yard shall be calculated using Equation 1 and Appendix A – Methodology for Calculating Facility Wide Emissions Limit. The Facility Wide Emissions Limt shall use facility-specific activity data included in the Initial Facility Outlook Plan specified in paragraph (e)(1):

(Equation 1)

 $F_{Cap,y} = (Loco_{em,y} + DT_{em,y} + CHE_{em,y} + TRU_{em,y}) \times (1 - R_y)$ Where, for a given compliance year (y):

- $F_{Cap,y}$ = Facility Wide Emissions Limit
- Loco_{em,y} = Sum of NOx emissions from all Locomotives visiting the applicable rail yard, including onsite and offsite Locomotive emissions within the South Coast Air Basin
- $DT_{em,y}$ = Sum of NOx emissions from all Drayage Trucks visiting the applicable rail yard, including onsite and offsite Drayage Truck emissions within the South Coast Air Basin
- $CHE_{em,y}$ = Sum of NOx emissions from all Cargo Handling Equipment operated within the applicable rail yard
- $TRU_{em,y}$ = Sum of NOx emissions from all TRU visiting the applicable rail yard, including onsite and offsite TRU emissions within the South Coast Air Basin
- R_y = [Placeholder for Additional Reduction Factor Beyond State Targets. $R_y \in [0,1]$]
- (B) Intermodal Rail Yard Operators shall comply with the Facility Wide Emissions Limit specified in paragraph (d)(1) in each compliance period using any combination of the following options:
 - Maintaining total facility wide emissions below the Facility Wide Emissions Limit specified in subparagraph (d)(1)(A);

- (ii) Using Early and Additional Action Banking (EAAB) benefits specified in subparagraph (d)(5)(A);
- (iii) Paying a mitigation fee as specified in subparagraph (d)(5)(B).
- (2) The owner and operator of a new intermodal rail yard shall ensure that sufficient zero emission infrastructure is installed to support the maximum energy demand projection specified in clause (e)(1)(B)(v) for the Initial Facility Outlook Plan and milestone dates specified in subparagraph (e)(2)(C) for the Owner Infrastructure Plan.
- (3) The operator of a new intermodal rail yard shall submit, in the manner specified by the Executive Officer, Plans, Reports, and Notifications to the South Coast AQMD indicated in subparagraphs (d)(3)(A) through (d)(3)(G). All Plans, Reports, and Notifications shall be certified by a Responsible Official attesting that the information submitted is accurate, based on best available knowledge.
 - (A) No later than 18 months prior to initial commencement of intermodal activities, the operator of a new intermodal rail yard must submit the Initial Facility Outlook Plan as specified in paragraph (e)(1).
 - Within 30 days of receipt of the Initial Facility Outlook Plan, the Executive Officer will conduct an initial review and confirm receipt.
 - (ii) The Executive Officer shall approve or reject the Initial Facility Outlook Plan within 90 days of submittal.
 - (iii) If no formal approval or rejection is received by the applicant, the application is presumed rejected unless otherwise provided for by the Executive Officer in writing. Approval or rejection will be based on whether:
 - (I) The Initial Facility Outlook Plan was prepared consistent with paragraph (e)(1); and
 - (II) The information provided was complete and accurate.
 - (iv) Within 30 days of receiving a formal rejection of an Initial Facility Outlook Plan application, the operator of a new intermodal rail yard shall revise and resubmit an Initial Facility Outlook Plan that corrects all identified deficiencies.

- (v) An Initial Facility Outlook Plan application shall be made available by the Executive Officer for public review no less than 30 days prior to approval.
- (B) No later than 12 months prior to initial commencement of intermodal activities, the owner of a new intermodal rail yard must submit an Owner Infrastructure Plan as specified in paragraph (e)(2);
 - Within 30 days of receipt of an Owner Infrastructure Plan, the Executive Officer will conduct an initial review and confirm receipt.
 - (ii) The Executive Officer shall approve or reject the Owner Infrastructure Plan within 90 days of submittal.
 - (iii) If no formal approval or rejection is received by the applicant, the application is presumed rejected unless otherwise provided for by the Executive Officer in writing. Approval or rejection will be based on whether:
 - (I) The Owner Infrastructure Plan was prepared consistent with paragraph (e)(2); and
 - (II) The information provided was complete and accurate.
 - (iv) Within 30 days of receiving a formal rejection of an Owner Infrastructure Plan application as specified in clause (d)(4)(B)(iii), the owner of a new intermodal rail yard shall revise and resubmit an Owner Infrastructure Plan that corrects all identified deficiencies.
 - (v) An Owner Infrastructure Plan shall be made available by the Executive Officer for public review no less than 30 days prior to approval.
- (D) Beginning on April 15 of the calendar year after the first full calendar year of operation and every April 15 thereafter, the operator of a new intermodal rail yard must submit an Annual Facility Wide Emissions Limit Compliance Report as specified in paragraph (f)(1).
- (F) No later than 30 days after a change in the intermodal rail yard Responsible Official or intermodal rail yard operator, the operator of a

new intermodal rail yard must submit an Intermodal Rail Yard Status Notication as specified in paragraph (g)(1).

- (G) Within 30 days after a change in owner of a new intermodal rail yard, the current owner of a new intermodal rail yard must submit an Intermodal Rail Yard Status Notification as specified in paragraph (g)(2).
- (4) Alternate Compliance Options
 - (A) Early and Additional Action Banking (EAAB)

An operator of a new intermodal rail yard may elect to apply EAAB towards compliance of the Annual Facility Wide Emissions Limit specified in paragraph (d)(1) by implementing the following:

- (i) Additional zero-emission infrastructure beyond what is required in paragraph (d)(2)
 - EAAB pursuant to clause (d)(4)(A)(i) may be generated by either an owner or operator of the new intermodal rail yard;
 - (II) EAAB pursuant to clause (d)(4)(A)(i) is nontransferrable, except that an owner of a new intermodal rail yard may elect to transfer its EAAB to the operator of the same new intermodal rail yard.
 - (III) [Placeholder for determining how additional zero emission infrastructure will apply to the facility wide emissions limit]
 - (IV) [Placeholder for lifetime of EAAB generated pursuant to clause (d)(5)(A)(i)]
 - (V) [Placeholder for maximum amount of EAAB generated pursuant to clause (d)(4)(A)(i) that can be held by an operator of a new intermodal rail yard]
- (ii) Additional reductions beyond that of the Annual Facility Wide Emissions Limit specified in paragraph (d)(1)
 - (I) EAAB pursuant to clause (d)(4)(A)(ii) may be generated by an operator of the new intermodal rail yard.

- (II) EAAB pursuant to clause (d)(4)(A)(ii) is non-transferrable.
- (III) [Placeholder for lifetime of EAAB generated pursuant to clause (d)(4)(A)(ii)]
- (IV) [Placeholder for amount of EAAB generated pursuant to clause (d)(4)(A)(ii) that can be applied in any year]
- (V) [Placeholder for maximum amount of EAAB generated pursuant to clause (d)(4)(A)(ii) that can be held by an operator of a new intermodal rail yard]
- (B) Mitigation Fee

An operator of a new intermodal rail yard may comply with the Annual Facility Wide Emissions Limit specified in paragraph (d)(1) by submitting a mitigation fee including the following:

- (i) [Placeholder for mitigation fee amount per ton of NOx and/or PM mitigated].
- (5) State or Local Agency Responsibility

Any state or local government agency who enters into a Contractual Agreement that includes the construction of a new intermodal rail yard and/or the operation of intermodal activities at a new intermodal rail yard shall include in such Contractual Agreement(s) a clause requiring full compliance with Rule 2306 by the applicable countersigned party or parties who are the owner or operator of the intermodal rail yard. Non-compliance with Rule 2306 shall be construed as a breach of such Contractual Agreement(s).

- (e) Plans for New Intermodal Rail Yards
 - (1) Initial Facility Outlook Plan

An Initial Facility Outlook Plan submitted pursuant to subparagraph (d)(3)(A) shall include calculations to determine the Annual Facility Wide Emissions Limit specified in paragraph (d)(1) certified and signed by the Responsible Official to be complete and accurate including the following:

- (A) Ownership and contact information of the intermodal rail yard including:
 - (i) Intermodal Rail Yard Operator;

- (ii) Contact information of Responsible Official for the Intermodal Rail Yard Operator;
- (iii) Intermodal Rail Yard Owner;
- (iv) Contact information of Responsible Official for the Intermodal Rail Yard Owner;
- (v) Duration of contractual agreement between Intermodal Rail Yard Owner and Operator (if applicable).
- (B) Information on general intermodal rail yard operations including:
 - (i) Intermodal rail yard operation schedule per calendar year;
 - (ii) Projected maximum capacity of the new intermodal rail yard;
 - (iii) Projected year facility maximum capacity is reached;
 - (vi) Projection of throughput per calendar year until maximum capacity is reached; and
 - (v) Projected energy demand to meet intermodal rail yard needs at maximum capacity specified in clause (e)(1)(B)(ii).
- (C) Anticipated Facility Equipment Fleet Composition and Operation Profile identifying and providing details on all mobile emission sources from the intermodal rail yard during standard business operations, including but not limited to the following:
 - (i) Locomotives
 - (I) Total number of line haul locomotives per day arriving and departing the facility;
 - (II) Maximum line haul locomotive throughput and expected calendar year at which the facility will reach maximum locomotive throughput capacity;
 - (III) Projected annual locomotive throughput from the initial calendar year the facility will begin operation until the calendar year that maximum throughput is reached;
 - (IV) Number of switcher locomotives (including tier type) operating onsite;
 - (V) Maximum onsite switcher locomotive population with expected year which maximum will be reached;

- (VI) Projected annual switcher locomotive population until the year of maximum throughput is reached; and
- (VII) Supporting data required to calculate Annual Facility
 Wide Emissions Limit specified in paragraph (d)(1) and
 Appendix A Methodology for Calculating Facility
 Wide Emissions Limit
- (ii) Drayage Trucks
 - (I) Maximum annual drayage truck trips at the facility for a calendar year;
 - (II) Projected annual drayage truck traffic until year that maximum throughput is reached;
 - (III) Onsite drayage truck VMT for ingress, egress, and other onsite movements;
 - (IV) Idle time for drayage trucks visiting the facility; and
 - (V) Supporting data required to calculate Annual Facility Wide Emissions Limit specified in paragraph (d)(1) and Appendix A – Methodology for Calculating Facility Wide Emissions Limit

(iii) Cargo Handling Equipment

- (I) Information on total population of cargo handling equipment at the intermodal rail yard including but not limited to the following:
 - (1) Applicable category types;
 - (2) Equipment model year;
 - (3) Fuel type;
 - (4) Manufacturer specified equipment output rating;
 - (5) Total number of units at the facility; and
 - (6) Projected annual hours of operation.
- (II) Supporting data required to calculate Annual Facility Wide Emissions Limit specified in paragraph (d)(1) and Appendix A – Methodology for Calculating Facility Wide Emissions Limit

(vi) Transport Refrigeration Units

- (I) Maximum annual TRU throughput at the intermodal rail yard for a calendar year;
- (II) Projected annual TRU throughput until the calendar year that maximum throughput is reached;
- (III) Number of electric grid power TRU plug-in points onsite;
- (IV) Projected time onsite while not connected to electrical grid power; and
- (V) Supporting data required to calculate Annual Facility
 Wide Emissions Limit specified in paragraph (d)(1) and
 Appendix A Methodology for Calculating Facility
 Wide Emissions Limit
- (2) Owner Infrastructure Plan

An Owner Infrastructure Plan shall include steps the Intermodal Rail Yard Owner will take to develop zero-emission infrastructure to meet the projected energy demand of the new intermodal rail yard provided in clause (e)(1)(B)(v), certified and signed by the Responsible Official to be complete and accurate, including but not limited to the following:

- (A) Ownership and contact information of the intermodal rail yard including:
 - (i) Contact information of Responsible Official for the owner;
 - (ii) Intermodal Rail Yard Operator;
 - (iii) Intermodal Rail Yard Owner; and
 - (vi) Duration of contractual agreement between facility owner and operator (if applicable).
- (B) Description of zero emission infrastructure development projects including:
 - (i) List of individual infrastructure development components;
 - (ii) Responsible party for individual components of infrastructure upgrade specified in clause (e)(2)(B)(i); and

- (iii) Cost breakdown for individual components of infrastructure upgrade specified in clause (e)(2)(B)(i);
- (C) Projected timeline of planned infrastructure development projects with corresponding dates of completion including the following project milestones:
 - (i) [Placeholder for infrastructure development milestones]
- (f) Reports
 - (1) Annual Facility Wide Emissions Limit Compliance Report

The Annual Facility Wide Emissions Limit Compliance Report shall include information that describes how the intermodal rail yard operator complied with the Facility Wide Mass Emissions Limit in the previous calendar year, as specified in subparagraph (d)(1)(A). The information submitted must at least include the following:

- (A) Number of days within the reporting year that the intermodal rail yard was in operation;
- (B) Facility Equipment Fleet Composition and Operation Profile identifying and providing details on all mobile emission sources from the intermodal rail yard during operations, including but not limited to the following:
 - (i) Locomotives
 - (I) Line Haul Locomotives
 - (1) Annual line haul locomotive visits by tier type;
 - (2) Gross train weight;
 - (3) Age of line haul locomotives (including remanufacturing dates);
 - (4) Number of locomotives per train;
 - (5) Idle times per locomotive at the facility;
 - (6) Total annual locomotive throughput; and
 - Travel distances for onsite movements and offsite movements from the facility to the border of the South Coast Air Basin.;
 - (II) Switcher Locomotives

- (1) Number of switcher locomotives by tier type;
- (2) Age of switcher locomotives (including remanufacturing dates);
- (3) Annual operating hours per switcher locomotive; and
- (4) Travel distances for onsite and offsite movements.
- (III) Supporting data required to calculate Annual Facility
 Wide Emissions Limit specified in paragraph (d)(1) and
 Appendix A Methodology for Calculating Facility
 Wide Emissions Limit
- (ii) Drayage Trucks
 - (I) Annual drayage truck visits by engine model year;
 - (II) Annual drayage truck throughput by pickups and dropoffs;
 - (III) Onsite drayage truck VMT for ingress, egress, and other onsite movements;
 - (IV) Offsite VMT from origin to destination;
 - (V) Idle times for drayage trucks visiting the facility; and
 - (VI) Supporting data required to calculate Annual Facility Wide Emissions Limit specified in paragraph (d)(1) and Appendix A – Methodology for Calculating Facility Wide Emissions Limit.
- (iii) Cargo Handling Equipment
 - (I) Information on total population of cargo handling equipment at the facility including but not limited to:
 - (1) Applicable category type;
 - (2) Equipment model year;
 - (3) Fuel type;
 - (4) Manufacturer specified equipment output rating;
 - (5) Total number of units at the facility; and
 - (6) Annual hours of operation.

- (II) Supporting data required to calculate Annual Facility Wide Emissions Limit specified in paragraph (d)(1) and Appendix A – Methodology for Calculating Facility Wide Emissions Limit
- (iv) Transport Refrigeration Units
 - (I) Annual TRU throughput;
 - (II) Annual number of TRUs utilizing electrical grid power onsite;
 - (III) Amount of time onsite while not connected to electrical grid power; and
 - (IV) Supporting data required to calculate Annual Facility Wide Emissions Limit specified in paragraph (d)(1) and Appendix A – Methodology for Calculating Facility Wide Emissions Limit.
- (3) Records which document the accuracy and validity of all information submitted to the South Coast AQMD as required by this rule shall be kept by the Intermodal Rail Yard Owner orOperator, as applicable, for a minimum of five years from the reporting deadline and made available upon request during normal business hours.
- (g) Notifications
 - (1) Intermodal Rail Yard Status Notification for Intermodal Rail Yard Operator No later than 30 days after a change in the intermodal rail yard Responsible Official or intermodal rail yard operator, the operator of a new intermodal rail yard must submit to the Executive Officer, an Intermodal Rail Yard Status Notification including the following:
 - (A) Current and previous intermodal rail yard operator;
 - (B) Date of operator change;
 - (C) Facility classification (if different from previous operator); and
 - (D) Responsible Official (if different from previous operator).
 - Intermodal Rail Yard Status Notification for Intermodal Rail Yard Owner
 No later than 30 days after a change in owner of a new intermodal rail yard, the current owner of a new intermodal rail yard must submit the Executive Officer, an Intermodal Rail Yard Status Notication including the following:

- (A) Current and previous intermodal rail yard owner;
- (B) Date of owner change;
- (C) Facility classification (if different from previous owner); and
- (D) Responsible Official (if different from previous owner).
- (h) 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. 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.