

PROPOSED RULE 4010 EMISSIONS INVENTORY AND HEALTH RISK ASSESSMENT SUBMITTAL REQUIREMENTS FOR THE PORT OF LOS ANGELES AND PORT OF LONG BEACH

(a) Purpose

This rule specifies requirements for the Ports of Los Angeles and Long Beach to submit emissions forecasts, emissions inventories, and a health risk assessment from port-related sources operating at, and traveling to and from, the ports.

(b) Applicability

This rule applies to the Port of Los Angeles and the Port of Long Beach, acting through their respective Boards of Harbor Commissioners. The ports may elect to comply separately or jointly with provisions of this rule regarding emission targets and emission forecasts. The ports shall comply jointly with the health risk assessment provisions.

(c) Definitions

- (1) **BASELINE HEALTH RISK** means the cancer risk to communities surrounding the ports due to exposure to emissions of diesel particulate matter (DPM) caused by port-related sources in 2005 within each 2 kilometer by 2 kilometer receptor grid cell adjacent to port owned properties established for the San Pedro Bay port-wide health risk assessment (Port HRA).
- (2) **BASELINE EMISSIONS** of NO_x, SO_x, PM_{2.5}, or DPM means port-wide emissions of NO_x, SO_x, PM_{2.5} or DPM, as applicable, from all port-related sources, as calculated in the 2005 annual emissions inventory developed by the Port of Los Angeles and the Port of Long Beach. For the purpose of this rule, the 2005 annual emissions inventory of port-related sources shall mean as approved by the Executive Officer.
- (3) **DIESEL PARTICULATE MATTER (DPM)** means the particles found in the exhaust of diesel-fueled port-related sources.
- (4) **EMISSIONS FORECAST** means a forecast of future-year emissions of NO_x, SO_x, PM_{2.5} or DPM from all port-related sources, submitted pursuant to subdivision (e).
- (5) **EXECUTIVE OFFICER** means the Executive Officer of the South Coast Air Quality Management District, as defined in Rule 102.

- (6) PORT-RELATED SOURCE means on- and off-road mobile sources operating at, and to and from, the ports of Los Angeles and Long Beach, including as, but not limited to, ocean going vessels, locomotives, heavy-duty trucks, harbor craft, and cargo handling equipment that emit NO_x, SO_x, PM_{2.5}, and/or diesel particulate matter (DPM). This definition is intended to be consistent with the Ports' annual emissions inventory methodology.
 - (7) SAN PEDRO BAY PORTS CLEAN AIR ACTION PLAN (CAAP) means the plan developed by the Ports of Los Angeles and Long Beach that targets reductions in DPM, NO_x, SO_x and PM_{2.5} from port-related sources
- (d) Baseline Emissions and Baseline Health Risk Reporting
- (1) Not less than *(120 days after Rule adoption)* the Port(s) shall submit an inventory of baseline emissions, as defined in subdivision (c), for NO_x, SO_x, and PM_{2.5}.
 - (2) Not less than *(120 days after Rule adoption)* the responsible port officials shall jointly submit an assessment of the baseline health risk, as defined in subdivision (c), for exposure to emissions of DPM.
- (e) Emissions Forecasts and Forecasted Health Risk Assessment
- (1) On or before January 1, 2012, the Port(s) shall submit to the Executive Officer an emissions forecast for year 2014 that includes emissions from all port-related sources of NO_x, SO_x, PM_{2.5} and DPM.
 - (2) On or before January 1, 2017, the Port's shall jointly submit to the Executive Officer a health risk assessment (HRA) that is based on an emissions forecast of DPM emissions from all port-related sources for year 2020, and shall:
 - (A) be conducted for emissions from both ports jointly;
 - (B) use an emissions inventory approved by the Executive Officer; and
 - (C) be conducted in accordance with modeling and risk assessment methodologies established for the San Pedro Bay port-wide health risk assessment (Port HRA), as approved by the Executive Officer.
 - (3) On or before January 1, 2020, the Port(s) shall submit to the Executive Officer an emissions forecast for year 2023 that includes emissions from all port-related sources of NO_x.

- (4) The Port(s) may voluntarily submit an updated emissions forecast and health risk assessment, as applicable, from all port-related sources to the Executive Officer at any time following the initial submittal dates specified in paragraphs (e)(1), (e)(2) and (e)(3).
 - (5) The Executive Officer will approve an emissions forecast submitted under this subdivision, provided the emissions forecast is developed pursuant to the methodology for emissions forecasts required under subdivision (g).
- (f) Emissions Reporting
- (1) On or before July 1, 2015, the Port(s) shall submit to the Executive Officer an emissions inventory for actual emissions of NO_x, SO_x, PM_{2.5} and DPM from all port-related sources for calendar year 2014.
 - (2) On or before July 1, 2021, the Port(s) shall submit to the Executive Officer an emissions inventory for actual emissions of DPM from all port-related sources for calendar year 2020.
 - (3) On or before July 1, 2024, the Port(s) shall submit to the Executive Officer an emissions inventory for actual emissions of NO_x from all port-related sources for calendar year 2023.
- (g) Methodology for Emissions Forecasts
- (1) Emissions forecasts shall be calculated using a cargo growth forecast that is utilized by the ports for planning and project approval purposes, or may, or may at the ports' discretion, use an alternate growth forecast if the ports demonstrate to the EO that such alternate forecast is likely to be more accurate. Any such growth forecast shall be presented to Ports' Harbor Commissions at a regularly scheduled public meeting and submitted to the Executive Officer at least 30 days prior to this meeting.
 - (2) Emissions forecasts shall be calculated by using the inventory of actual emissions from the most recent complete calendar year preceding the forecast submittal year.
 - (3) Emission forecasts shall be adjusted for each category of port-related sources, in order to account for:
 - (A) adopted international, federal, state and/or local rules and regulations;

- (B) programs implemented through the CAAP that are not required as part of rules and regulations described in subparagraph (g)(3)(A);
and
- (C) mitigation measures implemented for projects requiring a CEQA document.

PROPOSED RULE 4020 BACKSTOP REQUIREMENTS FOR EMISSION REDUCTIONS AND HEALTH RISKS AT THE SAN PEDRO BAY PORTS

(a) Purpose

The purpose of this rule is to establish backstop requirements in the event that forecasted emissions or health risk reductions from port-related sources do not meet emission or risk reduction targets.

(b) Applicability

This rule applies to the Port of Los Angeles and the Port of Long Beach, acting through their respective Boards of Harbor Commissioners. The ports may elect to comply separately or jointly with provisions of this rule regarding emission targets and emission forecasts. The ports shall comply jointly with health risk reduction targets.

(c) Definitions

- (1) **BASELINE HEALTH RISK** means the cancer risk to communities surrounding the ports due to exposure to emissions of diesel particulate matter (DPM) caused by port-related sources in 2005 within each 2 kilometer by 2 kilometer receptor grid cell adjacent to port owned properties established for the San Pedro Bay port-wide health risk assessment (Port HRA).
- (2) **BASELINE EMISSIONS** of NO_x, SO_x, PM_{2.5}, or DPM means port-wide emissions of NO_x, SO_x, PM_{2.5} or DPM, as applicable, from all port-related sources, as calculated in the 2005 annual emissions inventory developed by the Port of Los Angeles and the Port of Long Beach. For the purpose of this rule, the 2005 annual emissions inventory of port-related sources shall mean as approved by the Executive Officer.
- (3) **CONTROL STRATEGY** means a strategy that can reduce NO_x, SO_x, and/or PM_{2.5} emissions and can include incentive or disincentive programs.
- (4) **DIESEL PARTICULATE MATTER (DPM)** means the particles found in the exhaust of diesel-fueled port-related sources.
- (5) **EMISSIONS FORECAST** means a forecast of future-year emissions of NO_x, SO_x, PM_{2.5} or DPM from all port-related sources, submitted pursuant to Rule 4010 subdivision (e).

- (6) EMISSIONS TARGET means the percent reduction of the emissions forecast for a specific target year and pollutant from the port's 2005 baseline emissions, based on the port's cargo growth forecast accounting for adopted rules and regulations and short-term AQMP control measures.
 - (7) EMISSIONS SHORTFALL means the amount of forecasted emissions that are greater than the emissions target for NO_x, SO_x, PM_{2.5} and DPM, as applicable for a particular emissions target year.
 - (8) EXECUTIVE OFFICER means the Executive Officer of the South Coast Air Quality Management District, as defined in Rule 102.
 - (9) HEALTH RISK REDUCTION SHORTFALL means the amount of the forecasted health risk reduction that is below the 2020 health risk reduction target, as determined within each 2 kilometer by 2 kilometer receptor grid cell adjacent to port owned property.
 - (10) PORT-RELATED SOURCE means on- and off-road mobile sources operating at, and to and from, the ports of Los Angeles and Long Beach, including as, but not limited to, ocean going vessels, locomotives, heavy-duty trucks, harbor craft, and cargo handling equipment that emit NO_x, SO_x, PM_{2.5}, and/or diesel particulate matter (DPM). This definition is intended to be consistent with the Ports' annual emissions inventory methodology.
 - (11) RISK REDUCTION MEASURE means a measure that can reduce the exposure to diesel particulate matter, and can include incentive or disincentive programs.
 - (12) SAN PEDRO BAY PORTS CLEAN AIR ACTION PLAN (CAAP) means the plan developed for the Ports of Los Angeles and Long Beach, with measurable goals, that targets reductions in DPM, NO_x, SO_x and PM_{2.5} from port-related sources.
- (d) Triggers for Backstop of Targets
- (1) The Executive Officer shall notify the Port(s), as applicable, that the Port(s) shall comply with subdivision (e) if:
 - (A) the emissions forecast for the year 2014 submitted pursuant to Rule 4010 (e)(1) shows that the percent reduction of NO_x, SO_x, or PM_{2.5} emissions from the baseline emissions will be less than one or more of the following applicable 2014 emissions targets:

- (i) NO_x XX percent
 - (ii) SO_x XX percent
 - (iii) PM_{2.5} XX percent
 - (B) the emissions forecast submitted pursuant to Rule 4010 (e)(3) shows that the percent reduction of NO_x emissions from the baseline emissions will be less than the 2023 emissions target of XX percent.
- (2) The Executive Officer shall notify the Port(s), as applicable, that the Port(s) shall comply with subdivision (f) if:
- (A) the emissions forecast for the year 2014 submitted pursuant to Rule 4010 (e)(1) shows that DPM emissions will not meet a 73% reduction of DPM emissions by 2014 as compared to 2005 DPM emissions; or
 - (B) the health risk assessment submitted pursuant to Rule 4010 (e)(2) shows that the forecasted reduction in health risk will not meet an 85% reduction in cancer risk by 2020, relative to baseline health risk, within each 2 kilometer by 2 kilometer receptor grid cell adjacent to port owned properties established for the Port HRA.
- (3) The criteria pollutant backstop and/or the health risk backstop specified in subdivisions (e) and/or (f) shall not apply if an updated emissions forecast submitted pursuant to Rule 4010 (e)(4) shows that the emissions and/or health risk forecast no longer triggers a backstop provision.
- (4) The criteria pollutant backstop shall not apply if the Executive Officer determines that the overall 2007 SIP reduction commitment can be met for the 2014 and 2023 milestone years without additional reductions from the ports.
- (5) The port or both ports jointly, may petition the Executive Officer to update the most recently approved Air Quality Management Plan (AQMP) to reflect the latest planning assumptions, including but not limited to inventory methodologies and cargo growth factors, and such petition will be expeditiously considered by the Executive Officer. The Executive Officer will report to the Governing Board within 90 days regarding a recommendation to revise the AQMP. If a revised AQMP is approved, the Executive Officer will submit the revised AQMP to CARB for approval as

a revision to the State Implementation Plan as soon as possible and revise the applicable emissions target provided in paragraph (d) of this rule.

- (e) **Criteria Pollutant Backstops**
 - (1) Within 60 days after notification that one or more of the criteria pollutant backstops are triggered, the Port(s) shall submit an emission reduction plan to implement additional control strategies from port-related and other sources to eliminate the emissions shortfall by the applicable target date.
 - (2) If the emissions shortfall cannot be eliminated, the Port(s) shall demonstrate to the Executive Officer that:
 - (A) there are no additional control strategies that can be implemented with a cost-effectiveness that is less than:
 - i. the applicable Carl Moyer Program cost-effectiveness for NO_x and PM combined; or
 - ii. \$XX per ton of SO_x; or
 - (B) there is currently no legal mechanism for the ports to implement additional control strategies.
 - (3) The Executive Officer shall approve the emission reduction plan if it meets the requirements of this rule.
 - (4) If the emission reduction plan is disapproved, the Port(s) shall modify the plan as necessary to obtain approval within 180 days of the initial notification to submit a plan.
- (f) **Health Risk Backstops**
 - (1) Within 60 days after notification that the health risk backstop is triggered, the Port(s) shall submit a risk reduction plan that includes risk reduction measures sufficient to eliminate the risk reduction shortfall.
 - (2) Risk reduction plan shall include:
 - (A) a description of the risk reduction measures and implementation schedule for each measure; and
 - (B) the risk reduction or DPM emission reductions that each measure will achieve.
 - (2) The Port(s) shall implement the risk reduction measures specified in the risk reduction plan approved by the Executive Officer as quickly as feasible, but no later than three (3) years from the initial plan submittal date.

- (3) The Executive Officer shall approve time extensions to comply with paragraph (f)(2) in increments of up to two (2) additional years to implement risk reduction measures and achieve required risk reductions, provided the Port(s) demonstrates one or more of the following criteria:
 - (A) there is no known technology or risk reduction measure that is commercially available that can achieve required risk reductions within the required time period; or
 - (B) there is currently no legal mechanism for the port to implement the risk reduction measure.
 - (4) Any extension beyond the first two year extension must be presented to and approved by the South Coast Air Quality Management's Governing Board.
 - (5) The Executive Officer shall approve the risk reduction plan if it meets the requirements of this rule.
 - (6) If the risk reduction plan is disapproved, the Port(s) shall modify the plan as necessary to obtain approval within 180 days of the initial notification to submit a risk reduction plan.
- (g) Enforcement and Variances
- (1) The ports shall comply with the approved Plan
 - (2) A port, or both ports jointly, may petition the District Hearing Board for a variance, pursuant to applicable laws and rules, from any provision of this Rule.