

**PROPOSED RULE 3504 RISK REDUCTION FROM DIESEL RELATED OPERATIONS AT RAILYARDS**

- (a) Purpose  
This purpose of this rule is to reduce the health risks related to railyard operations.
  
- (b) Applicability  
This rule shall apply to railyards operated by Class I freight railroads and switching and terminal railroads operated in the district with an approved Health Risk Assessment showing a risk greater than the Action Risk Level.
  
- (c) Definitions
  - (1) ACTION RISK LEVEL for purposes of this rule means a MICR of twenty-five in one million ( $25 \times 10^{-6}$ ), cancer burden of 0.5, or a total acute or chronic HI of three (3.0) for any target organ system at any receptor location.
  - (2) CANCER BURDEN means the estimated increase in the occurrence of cancer cases in a population subject to a MICR of greater than or equal to one in one million ( $1 \times 10^{-6}$ ) resulting from exposure to toxic air contaminants.
  - (3) 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.
  - (4) FACILITY means any source or grouping of sources or other air contaminant-emitting activities 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 person (or by persons under common control). Such above-described groupings, if on noncontiguous properties, connected only by land carrying a pipeline, shall not be considered one facility.
  - (5) HEALTH RISK ASSESSMENT means a detailed comprehensive analysis prepared to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and

to assess and quantify both the individual and population-wide health risks associated with those levels of exposure

- (6) LOCOMOTIVE ENGINE means the main propulsion engine or engines incorporated into a locomotive or intended for incorporation into a locomotive.
- (7) LOCOMOTIVE means, for the purpose of this rule, a self-propelled piece of on-track equipment designed for moving or propelling railroad cars that are designed to carry freight or other equipment, but which itself is not designed or intended to carry freight, passengers (other than those operating the locomotive) or other equipment. Other equipment that is designed for operation both on highways and rails; specialized railroad equipment for maintenance, construction, post accident recovery of equipment, and repairs, and other similar equipment; and vehicles propelled by engines with rated horsepower of less than 750 kW (1006 hp) are not locomotives (see 40 Code of Federal Regulations Parts 86 and 89 for this equipment).
- (8) MAXIMUM INDIVIDUAL CANCER RISK (MICR) means the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to toxic air contaminants over a period of 70 years for residential and 40 years for worker receptor locations. The MICR calculations shall include multi-pathway consideration if applicable.
- (9) OPERATOR means the railroad responsible for operations in the District.
- (10) RAILROAD means a commercial entity that operates locomotives to transport passengers or freight.
- (11) RAILROAD OPERATIONS means those operations associated with railroads such as line haul services, switching and terminal services; maintenance, service, and repair of locomotives and railcars; off-road and stationary equipment associated with activities such as loading, unloading, moving and transfer of passengers or freight, track repair and maintenance operations, and other similar operations conducted by a railroad
- (12) RAILYARD means an area where railroad operations and associated railroad activities occur.
- (13) RECEPTOR LOCATION means:

- (A) for the purpose of calculating acute HI, any location outside the boundaries of the facility at which a person could experience acute exposure; and
- (B) for the purpose of calculating chronic HI and MICR, any location outside the boundaries of the facility at which a person could experience chronic exposure.

The Executive Officer shall consider the potential for exposure in determining whether the location will be considered a receptor location.

- (14) **RISK REDUCTION MEASURE** means a control measure which will reduce or eliminate the health risk associated with emissions of toxic air contaminants, is real, permanent, quantifiable, and enforceable through District permit conditions if applicable or other enforceable measures such as a plan. Risk reduction measures may include, but are not limited to feedstock modification; product reformulations; production system modifications; system enclosure, emissions control, capture or conversion; operational standards or practices modifications; emissions collection and exhaust; source control; or alternative technologies.
- (15) **SIGNIFICANT RISK LEVEL**, for purpose of this rule, means a MICR of one hundred in one million ( $1.0 \times 10^{-4}$ ), or a total acute or chronic HI of five (5.0) for any target organ system at any receptor location.
- (16) **SWITCHING AND TERMINAL RAILROAD** means a non-Class I railroad engaged primarily in switching and/or terminal services for other railroads.
- (17) **TOTAL ACUTE HAZARD INDEX (HI)** means the sum of the individual substance acute HIs for all toxic air contaminants identified in the risk assessment guidelines as affecting the same target organ system.
- (18) **TOTAL CHRONIC HAZARD INDEX (HI)** means the sum of the individual substance chronic HIs for all toxic air contaminants identified in the risk assessment guidelines as affecting the same target organ system.
- (19) **TOXIC AIR CONTAMINANT**, for the purpose of this rule, means an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health and is included in the AB 2588, Health and Safety Code Section 44300, et seq., list of toxic air contaminants.

(d) Requirements

- (1) The operator of a railyard with an approved Health Risk Assessment showing a facility-wide risk that is greater than the Action Risk Level shall submit a Risk Reduction Plan to the Executive Officer pursuant to subdivision (e).
- (2) As quickly as feasible, but no later than three years after the initial submittal of the Risk Reduction Plan pursuant to paragraph (e)(1), the operator of a railyard shall fully implement risk reduction measures specified in an approved Risk Reduction Plan.
- (3) The Executive Officer may approve time extensions in increments of up to two (2) additional years to comply with paragraph (d)(2) if the measures identified in the Risk Reduction Plan cannot be implemented within the required time period because the only commercially available risk reduction measure(s) are preempted by federal law and/or technologically infeasible to the specific operation or application. The operator of a railroad shall provide:
  - (A) for risk reduction measure(s) where the district is determined to be preempted by federal law from requiring implementation of the measure, provided the operator submits an analysis of federal law, and a description of the factual basis which support the claim of preemption;
  - (B) for risk reduction measures that have been determined to be technologically infeasible for the specific operation or application, information which supports the infeasibility determination.
- (4) The operator of a railroad shall implement risk reduction measures in an approved Risk Reduction Plan by the dates specified in the plan for each risk reduction measure.

(e) Risk Reduction Plan Submittal

Within 180 days after approval of a Health Risk Assessment prepared pursuant to Rule 3503, the operator of a railyard shall submit a Risk Reduction Plan to the Executive Officer that includes at a minimum the following information:

- (1) Facility name, address, and contact person;
- (2) Identification of each source or source category emitting toxic air contaminants, and the toxic air contaminants emitted, based on the approved Health Risk Assessment;

- (3) For each source category emitting toxic air contaminants, identification of commercially available risk reduction measures, including the emission and risk reduction potential, estimated costs, and time necessary for implementation;
  - (4) For each source or source category identified in paragraph (e)(2), identification of the risk reduction measures identified in paragraph (e)(3) that will be implemented by the operator. The operator shall identify sufficient measure to achieve the action risk level, or shall identify all measures except those which are preempted or technically infeasible, as specified in paragraph (e)(5);
  - (5) The operator may exclude a risk reduction measure identified in paragraph (e)(3) provided:
    - (A) the district is preempted by federal law from requiring implementation of the measure, provided the operator submits an analysis of federal law, and a description of the factual basis which support the claim of preemption, or
    - (B) the measure is technologically infeasible for the operation or application, provided that the operator submits information which supports the infeasibility determination.
  - (6) Identification of any source or source category identified in paragraph (e)(2) where no commercially available risk reduction measures were identified;
  - (7) An implementation schedule that takes into account the prioritization of progress for risk reduction measures that will achieve the necessary or greatest reduction at the earliest feasible date;
  - (8) An estimation of the residual health risk after implementation of the specified risk reduction measures in the Risk Reduction Plan; and
  - (9) If requesting an extension, information required to demonstrate that the Risk Reduction Plan qualifies for time extension and the length of the time extension, not to exceed two years, requested pursuant to paragraph (d)(3);
  - (10) The name, title and signature of the responsible company official certifying the accuracy of the records submitted.
- (f) Approval of Risk Reduction Plan
- (1) Within 180 days of submittal of a Risk Reduction Plan, the Executive Officer will approve or disapprove the Risk Reduction Plan. The

Executive Officer shall disapprove the Risk Reduction Plan unless it complies with the requirements of this rule.

- (2) If the Executive Officer disapproves the Risk Reduction Plan, the operator of a railyard shall revise and resubmit within 90 days after being notified in writing of the decision. The revised submittal shall correct all deficiencies identified by the Executive Officer.
- (3) Within 90 days of the submittal of a revised Risk Reduction Plan, the Executive Officer will approve or disapprove the revised Risk Reduction Plan. The Executive Officer will modify the Risk Reduction Plan to correct any deficiencies that the operator has not properly corrected and approve it as modified within 180 days of the disapproval of the second submittal or failure to resubmit

(g) **Appealing Disapproval of Risk Reduction Plan**

The operator of a railyard may appeal the disapproval by the Executive Officer of a Risk Reduction Plan to the Hearing Board under Rule 216 – Appeals and Rule 221 - Plans. If the Hearing Board denies the appeal, the Risk Reduction Plan shall be revised, consistent with the findings and rulings of the Hearing Board and resubmitted within 90 days after the Board’s decision. The revised submittal shall correct all deficiencies identified by the Hearing Board.

(h) **Progress Reports**

- (1) 12 months after the Risk Reduction Plan is approved, and every year thereafter, the operator of a railyard shall submit to the Executive Officer an annual progress report on the risk reductions achieved over the past twelve months. The annual report shall include, at a minimum, all of the following information:

(A) The progress achieved in implementing the risk reduction measures in the previous 12 months in comparison with measures specified in the plan; and

(B) A schedule for implementing the risk reduction measures for the next 12 months.

(i) **Plan Update or Modification**

- (1) If information becomes known to the Executive Officer after the last submitted Risk Reduction Plan that would substantially impact risks to exposed persons, implementation, or effectiveness of the Risk Reduction

Plan, the Executive Officer may require the plan to be updated and resubmitted.

- (2) Prior to a change in the risk reduction measures or schedule specified in the approved Risk Reduction Plan, the operator of the railyard shall submit to the Executive Officer for approval an application for plan modification. The application shall include a demonstration that the change in the risk reduction measures is necessary and will result in an equivalent or greater risk reduction. No change shall be made until the modification to the plan is approved.
- (3) Any request for a time extension shall be made at least 180 days before the end of the applicable deadline to achieve the required facility-wide risk level that is specified in the approved Risk Reduction Plan.

(j) Community Action Plan

- (1) On or before January 1, 2006, the operator of a railyard shall submit a Community Action Plan to the Executive Officer that includes the following information:
  - (A) Identification of a designated onsite Community Liaison to communicate with the affected community members to develop cooperative solutions to local air quality concerns related to railyard operations.
  - (B) A schedule that identifies at least two community briefings on implementation of Rules 3503 and 3504 that will be held each year;
  - (C) Establish a community complaint hotline to address community concerns on air emissions, including odor;
  - (D) Post signs at facility entrances and exits with the phone number of the complaint hotline for community members; and
  - (E) Develop and implement a complaint resolution plan to ensure that complaints received from the community are responded to quickly and effectively.
- (2) Within 180 days of submittal of the Community Action Plan, the Executive Officer will approve or disapprove the Community Action Plan based on the complete information specified.

(k) Fence Line Monitoring

(March 8, 2005)

Within 90 days after approval of a Health Risk Assessment pursuant to Rule 3503 the operator of a railyard shall prepare a fence line monitoring program to measure air concentrations for pollutants specified by the Executive Officer if the approved Health Risk Assessment concludes that the railyard will exceed the significant risk level.

(1) Fees

The Risk Reduction Plan and Community Action Plan shall constitute plans for the purpose of fees assessed under Rule 306 – Plan Fees.