State of California
AIR RESOURCES BOARD

Resolution 10-29

June 24, 2010

Agenda Item No.: 10-6-5

WHEREAS, section 39002 of the Health and Safety Code provides that the control of air pollution from vehicular sources, except as otherwise provided in Division 26 of the Health and Safety Code, shall be the responsibility of the Air Resources Board (ARB or Board);

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize ARB to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to, and imposed upon, the Board by law;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that the Board may delegate any duty to the Executive Officer which the Board deems appropriate and that any power, duty, purpose, function, or jurisdiction which the Board may lawfully delegate shall be conclusively presumed to have been delegated to the Executive Officer unless the Board has expressly reserved such authority onto itself;

WHEREAS, section 41511 of the Health and Safety Code provides that for the purpose of carrying out its duties, ARB may adopt rules and regulations to require the owner or the operator of any pollution emission source to take such action as ARB may determine to be reasonable for the determination of the amount of emissions from such source;

WHEREAS, under section 39650 of the Health and Safety Code, the Legislature finds and declares that it is the public policy of the State that emissions of toxic air contaminants should be controlled to levels that prevent harm to the public health;

WHEREAS, pursuant to section 39662(b) of the Health and Safety Code, on August 27, 1998, the Board identified particulate matter (PM) emissions from diesel fueled engines (diesel PM) as a toxic air contaminant (TAC) pursuant to article 3 (commencing with section 39650), chapter 3.5, part 2, division 26 of the Health and Safety Code as more fully described in Resolution 98-35;

WHEREAS, pursuant to section 39669.5(a) of the Health and Safety Code, the Office of Environmental Health Hazard Assessment has listed diesel PM and other compounds associated with diesel exhaust as possibly causing infants and children to be especially susceptible to illness;

WHEREAS, pursuant to section 39665 of the Health and Safety Code, ARB staff prepared a comprehensive diesel emissions risk reduction plan to significantly reduce PM emissions from diesel-fueled engines and vehicles, which the Board approved on September 28, 2000;

WHEREAS, sections 39658, 39662, 39665, 39666, and 39667 of the Health and Safety Code authorize the Board to establish airborne toxic control measures (ATCM) for substances identified as TACs in accordance with specified criteria;

WHEREAS, section 39666 of the Health and Safety Code, the Board is required to adopt ATCMs to reduce emissions of TACs from nonvehicular sources consistent with the criteria set forth in sections 39662 and 39665;

WHEREAS, in section 43000 of the Health and Safety Code, the Legislature has declared that the emissions of air pollutants, including oxides of nitrogen (NOx) and PM from motor vehicles, are the primary cause of air pollution in many parts of the State, that the State has the responsibility to establish uniform procedures for compliance with standards which control or eliminate those air pollutants, and that vehicle emission standards applied to new and used motor vehicles equipped with motor vehicle pollution control devices are standards with which all motor vehicles shall comply;

WHEREAS, Health and Safety Code section 43013 authorizes the Board to adopt standards and regulations for, among other things, light-, medium-, and heavy-duty motor vehicles, off-road or nonvehicular engine categories, including locomotives, unless preempted by federal law;

WHEREAS, section 39602.5 of the Health and Safety Code authorizes the ARB to adopt rules and regulations pursuant to section 43103 of the Health and Safety Code that in conjunction with other measures adopted by the ARB, the districts, and the United States Environmental Protection Agency (U.S. EPA), will achieve ambient air quality standards required by the federal Clean Air Act (CAA) in all areas of the state by the applicable attainment date and to maintain these standards thereafter;

WHEREAS, section 43018(a) of the Health and Safety Code directs the Board to endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of the state ambient air quality standards at the earliest practicable date;

WHEREAS, under the federal CAA, the U.S. EPA has established national ambient air quality standards (NAAQS) for pollutants considered harmful to public health, including fine particulate matter (PM2.5), of which diesel PM is a constituent part, and ozone, and

states that exceed the NAAQS are required by federal law to develop State Implementation Plans (SIPs) describing how they will attain the standards by certain deadlines;

WHEREAS, both the South Coast and San Joaquin Valley Air Basins are designated non-attainment for both the state ambient standards and NAAQS for PM2.5, and the federal CAA requires both air basins to attain the PM2.5 NAAQS by 2014;

WHEREAS, the PM2.5 SIP was submitted to U.S. EPA November 16, 2007, and air quality modeling indicates that significant reductions of diesel PM are crucial to meeting the PM2.5 NAAQS;

WHEREAS, in January 2005, a Goods Movement Cabinet Workgroup, created by Governor Schwarzenegger and led by the California Environmental Protection Agency and the Business, Transportation and Housing Agency, established a policy for goods movement and ports to improve and expand California's goods movement industry and infrastructure while improving air quality and protecting public health;

WHEREAS, the Goods Movement Cabinet Workgroup, in collaboration with the logistics industry, local and regional governments, neighboring communities, business, labor, environmental groups, and other interested stakeholders created the 2007 Goods Movement Action Plan, which outlines a comprehensive strategy to address the economic and environmental issues associated with moving goods via the state's highways, railways, and ports;

WHEREAS, in April 2006, the Board approved its Emission Reduction Plan for Ports and Goods Movement in California (2006 Emission Reduction Plan), which sets forth a framework for action to reduce the statewide health risk from diesel PM 85 percent between 2001 and 2020, and to reduce localized risk in communities adjacent to major goods movement facilities, including rail yards, as expeditiously as possible;

WHEREAS, in 1990, Congress adopted amendments to the CAA, which specifically preempted in section 209(e)(1) California, as well as all other states, from adopting emission standards and other requirements related to the control of emissions from new locomotives and locomotive engines;

WHEREAS, in 1998, U.S. EPA promulgated a final rule establishing emission standards for locomotives and locomotive engines (1998 Final Locomotive Rule) (63 Fed.Reg 18978 (April 16, 1998), in which U.S. EPA determined that "new locomotive" means a freshly manufactured locomotive that has not as yet been placed into service or a remanufactured locomotive that has not been placed back into service and that the preemption for a new locomotive runs for 133 percent of the useful life of the locomotive (73 Fed.Reg. at 18979 -18980);

WHEREAS, under the federal preemption as interpreted by U.S. EPA in the 1998 Final Locomotive Rule, states have authority to regulate only those locomotives that have

been manufactured before 1973, have not been remanufactured, and have exceeded 133 percent of their useful life since initial manufacture or last remanufacture;

WHEREAS, although a number of locomotives that are not preempted by the federal CAA presently operate statewide, most operate outside the South Coast Air Basin;

WHEREAS, recognizing the limited opportunities to achieve significant emission reductions through adoption of emission standards for non-preempted locomotives, ARB entered into memoranda of understanding with the Union Pacific Railroad Company (UP) and BNSF Railway (BNSF) (jointly referred to as the Railroads) in 1998 and 2005, respectively entitled "Memorandum of Mutual Understandings and Agreements, South Coast Locomotive Fleet Average Emissions Program" (1998 Agreement) and "ARB/Railroads Statewide Agreement, Particulate Emissions Reduction Program at Statewide Rail Yards" (2005 Agreement);

WHEREAS, the 1998 and 2005 Agreements recognize that federal law may broadly preempt the state from regulating new locomotives, rail yards, and rail operations, but courts have recognized that public jurisdictions have authority to enter into enforceable railroad agreements to reduce emissions;

WHEREAS, as of January 1, 2010, the 1998 Agreement has been fully implemented and is achieving NOx emission reductions of 65 percent and ancillary diesel PM reductions of about 50 percent in the South Coast Air Basin in 2010, and the 2005 Agreement is achieving diesel PM emission reductions of at least 20 percent from pre-2005 levels;

WHEREAS, the Railroads have in good faith met their obligations and responsibilities under both the 1998 and 2005 Agreements;

WHEREAS, under the 2005 Agreement, ARB completed health risk assessments (HRAs) at all 18 major California rail yards (2005 designated rail yards), which found that living around a rail yard poses a significant public health risk resulting from the exposure to diesel PM;

WHEREAS, since 2004, ARB has adopted a number of regulations that reduce diesel PM emissions from rail yard sources, including in-use emission standards for transport refrigeration units (adopted 2004, implementation beginning January 1, 2010), cargo handling equipment (adopted 2005, implementation beginning January 1, 2007), and heavy-duty drayage trucks (adopted 2008, implementation beginning January 1, 2010);

WHEREAS, in 1998 and again in 2008, U.S. EPA adopted more increasingly stringent emission standards for freshly manufactured and remanufactured switcher and line-haul locomotives;

WHEREAS, the regulations adopted by ARB and U.S. EPA, in combination with the 1998 and 2005 Agreements, reduced diesel PM emissions at the high-priority rail yards by half between 2005 and 2010, with significant additional reductions by 2015 and 2020;

WHEREAS, despite the significant reductions that will be achieved by the above-referenced measures and Agreements, diesel PM emissions in and around specific rail yards remain too high and continue to pose significant health risk to people who live near those rail yards;

WHEREAS, in 2020, after near full implementation of ARB regulations for transport refrigeration units, cargo handling equipment, clean fuel for intrastate locomotives, and drayage trucks, approximately 85 percent of the remaining diesel PM emissions statewide from rail yard sources will come from locomotives that California is preempted from regulating under the CAA;

WHEREAS, in September 2009, the Board directed ARB staff to:

- Develop an approach for the Railroads to prepare and implement risk reduction plans for the several rail yards that posed the greatest health risk to people who live near such facilities;
- Include the BNSF San Bernardino Rail Yard as one of the rail yards for which a risk reduction plan is to be created and to use that plan as the template for other rail yards;
- Establish criteria for triggering regulatory and other actions to address rail yard emissions and risk if alternative approaches for achieving emission and risk reductions fail to achieve the objectives of staff's initially selected approach;
- Work with affected stakeholders, including local cities and air districts, community organizations, and the railroads; and
- Report back to the Board with recommendations;

WHEREAS, between September 24, 2009 and the February 25, 2010 Board meeting, staff did the following: met with affected stakeholders to discuss possible approaches to develop an emission reduction plan that will achieve significant emission reductions at identified high-priority rail yards; collected additional information on rail yards to update the diesel PM emissions, potential health risks at the identified high-priority rail yards, and projected changes in growth over the next several years; considered potential rail yard specific control measures that could be undertaken by either the Railroads voluntarily committing to achieve the reductions or by the Board through its rulemaking authority; and evaluated the best approach for achieving the greatest emissions reductions;

WHEREAS, having identified BNSF San Bernardino, BNSF Hobart, UP Commerce, and UP ICTF/Dolores as high-priority rail yards (identified high priority-rail yards) in which to achieve expedited emission reductions and having found that the greatest emission and risk reductions at the identified high-priority rail yards could be achieved by obtaining commitments from the Railroads through an exchange of letters with ARB, staff recommended to the Board at its February 2010 hearing that:

- After a public consultation process with interested stakeholders to help identify rail yard-specific measures, ARB would set forth in a letter to the Railroads specific commitments that the Railroads would agree to and be bound to undertake;
- The ARB commitment letter to the Railroads would, among other things, require the Railroads to take the following actions at identified high-priority rail yards:
  - Meet specific emission reduction targets over time at the identified high-priority rail yards;
  - Undertake periodic emission inventories;
  - Establish emission reduction plans or reports to show assessment of progress in meeting established targets by implementing emission reduction measures for rail yard emission sources, including locomotives that ARB would otherwise be preempted from regulating under the CAA;
- If the Railroads failed to meet their commitments that ARB staff would propose regulations for the Board to consider that will obtain emission reductions not preempted under federal law; and
- Provisions would be crafted to ensure that if the ARB staff failed to make timely regulatory recommendations to the Board, other stakeholders could take action to mandate the staff to so act;

WHEREAS, the Board accepted the staff's recommendations and directed that staff proceed, in as transparent a process as possible, to meet with the Railroads and other stakeholders and do the following:

- After receiving input from community residents and their associations, exchange letters with the Railroads in which the Railroads will commit to achieve rail yard specific emission reduction targets through measures that are measurable and enforceable;
- Continue its efforts to obtain federal and state incentive funds to assist the Railroads in achieving their committed-to reduction targets;
- Develop backstop regulations to be presented to the Board if the Railroads fail to meet their commitments; and
- Work with the Railroads, local governments and air districts, community associations, and residents in a collaborative effort to address community enhancement projects, such as trees and walls around the perimeter of rail yards, that address neighborhood issues at specific rail yards;

WHEREAS, in response to the Board's directives at the February 2010 hearing, ARB staff has continued to meet with community residents and their associations, local governments and air districts, and the Railroads to develop commitments from the Railroads to, among other things, achieve emission reductions and engage collaboratively in efforts to implement local community enhancement projects around identified high-priority rail yards;

WHEREAS, ARB staff prepared draft documents describing the basis for the proposed commitments for each of the identified high-priority rail yards, and commitments to be undertaken by the Railroads and ARB at each identified high-priority rail yard, and made copies of the draft documents available to stakeholders prior to discussion at public meetings on June 7, 2010 in Commerce and June 9, 2010 in San Bernardino;

WHEREAS, with the information and comments received from such meetings, ARB staff modified the draft documents to prepare the proposed 2010 Commitments, a copy of which is attached hereto, that accelerated the schedule for emission reductions and evaluation of operational changes, clarified ARB's obligation to estimate the changes in health risks that would result from implementation of each required emission reduction plan and the operational changes to be evaluated by the Railroads, and emphasized ARB's responsibility to make publicly available all of the staff's findings on review of documents the Railroads would be required to submit under the commitments;

WHEREAS, on June 15, 2010, staff released a Staff Report supporting the proposed 2010 Commitments, which identifies and explains, among other things, the analyses that ARB developed for each of the identified high-priority rail yards that serve as the basis for the emission reduction commitments and show that greater and earlier emission reduction benefits would be achieved through the aforementioned 2010 Commitments than otherwise would be achieved through direct regulation;

WHEREAS, the Staff Report includes proposed versions of the Basis and 2010 Commitment documents, which are appended to the Staff Report in Appendices A-D for each rail yard;

WHEREAS, for each of the identified high-priority rail yards, the Railroads would commit to achieving, irrespective of any increase in activity or growth at the rail yard, 85 percent diesel PM emission reductions from 2005 baseline levels by 2020 and interim diesel PM emission levels in 2011, 2013, 2015, and 2017; initiating any additional actions needed to meet the diesel PM emission reduction levels on the stated schedules; assessing potential changes in rail yard operations; identifying non-preempted switch or medium horsepower locomotives that routinely operate in the yard; developing rail yard-specific emission inventories, air dispersion modeling, and emission reduction plans; and upon request by ARB, working with local governments and communities to identify and assess community enhancement projects in nearby neighborhoods;

WHEREAS, ARB would, among other things, commit to developing HRAs; reviewing the emission inventories, air dispersion modeling, and emission reduction plans submitted by the Railroads to determine if they are complete and accurate and, for the emission reduction plans, determining if they can reasonably achieve the emissions targets; estimating the changes in health risk associated with the emission reduction plans and potential operational changes; determining Railroad compliance with the diesel PM emission reduction levels; seeing that a PM2.5 ambient air quality monitor is installed in the community near the BNSF San Bernardino yard, and one is installed in the community near the UP Commerce/BNSF Hobart yards;

WHEREAS, ARB would also commit to not taking any action to adopt regulations within its authority that would affect rail yard sources, unless necessary to achieve the goals of the State Implementation Plan or Climate Change Scoping Plan, or to seek changes in federal law, so long as the Railroads meet their commitments outlined above; but if the Railroads failed to meet their agreed to commitments, ARB staff would return to the Board within approximately four months from the date of a final determination of non-compliance with proposed regulations to achieve the maximum feasible PM emission reductions that ARB is not otherwise preempted from adopting under federal law and taking such other further actions as the Board deems necessary to obtain greater authority to regulate rail yard sources;

WHEREAS, ARB staff expects that the Railroads in meeting their commitments at the identified high-priority rail yards would continue their typical current practice to upgrade switch and medium horsepower locomotives by replacing the old engine in an existing locomotive with a new engine or engines, rather than by introducing a new locomotive and redirecting the existing locomotive to another rail yard in California;

WHEREAS, the Railroads' commitment to reduce emissions at the identified high-priority rail yards are not emission reductions for which specific performance can be mandated;

WHEREAS, the California Environmental Quality Act (CEQA), section 21080.5 of the Public Resources Code and Board regulations at title 17, CCR, section 60006 require that no project that may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, the Board finds, based on its independent judgment and analysis of the entire record before it, including the Staff Report, written comments and public testimony it has received, that:

- The exchange of commitment letters and full implementation thereof would achieve 85 percent diesel PM emission reductions from 2005 levels by 2020 at each of the identified rail yards;

- Residents living within two miles of the identified rail yards are the intended beneficiaries of the 2010 Commitments to reduce rail yard emissions and the health risk associated with such emissions, and they are entitled to enforce ARB's commitments, but not any of the commitments of the Railroads, both as specified in the 2010 Commitments;
- Direct regulation of non-preempted rail yard emission sources would achieve substantially less reduction in diesel PM emissions than the 2010 Commitments;
- The maximum individual cancer risk of 400 in a million over a 70-year exposure that is projected to remain near the BNSF San Bernardino Rail Yard in 2020 is not acceptable;
- Incentive funding and the Railroads' commitment to provide independent funding toward achieving the emission reduction targets are essential elements in achieving the goals at the identified rail yards, but the 2010 Commitments are not conditioned on the availability of public incentive funding;
- It is appropriate that so long as the Railroads meet their commitments as set forth in the 2010 Commitments, that ARB not take any action to regulate rail yard sources or to take any other federal legislative or administrative actions to obtain greater authority over rail yard sources; but If the Railroads failed to meet their agreed to commitments, the commitments are properly backstopped by ARB staff's commitment to return to the Board within approximately four months with proposed regulations to achieve the maximum feasible PM emission reductions and to take such further as ARB deems necessary to obtain greater authority to regulate rail yard sources; and

WHEREAS, because section 209(e) of the federal CAA does not preempt California from entering into voluntary commitments with the Railroads to achieve emission reductions from locomotives, engines used in locomotives, and other nonroad engines, California is not required to request a waiver from U.S. EPA pursuant to CAA section 209(e)(2).

NOW, THEREFORE, BE IT RESOLVED that the Board delegates to the Executive Officer the decision on final approval of staff's recommendation for the exchange of cover letters to implement the 2010 Commitments between ARB and the Railroads subject to his performing such appropriate environmental analysis as required under CEQA.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer, before taking action on the staff's recommendations, to meet with the Railroads to propose new provisions in the 2010 Commitments to ensure that the Railroads maintain the emission reduction progress already achieved at the identified rail yards under the 2010 Commitments, taking into account the reductions achieved under the 1998 and 2005 Agreements, in the event that ARB rulemaking is triggered in response to Railroad non-compliance with the 2010 Commitments. If the Executive Officer concludes that provisions cannot be developed and implemented to accomplish this purpose, the Executive Officer shall inform the Board.

BE IT FURTHER RESOLVED that if the Executive Officer approves staff's recommendations, he shall sign and forward ARB's cover letters with the 2010 Commitments, as revised, for each identified rail yard.

BE IT FURTHER RESOLVED that if the Executive Officer approves staff's recommendations, the Board directs staff to meet the ARB-identified obligations set forth in this Resolution and the 2010 Commitments, as revised, to address health risks associated with emissions at the identified high-priority rail yards and to ensure that real, verifiable, and enforceable emission reductions are achieved.

BE IT FURTHER RESOLVED that if the Executive Officer approves staff's recommendations, and it is determined by the Executive Officer or, if appealed, the administrative appeals panel that either of the Railroads has failed to meet the commitments specified in sections 1, 2, 4, 5, and 6 of the rail yard-specific 2010 Commitments, the Board directs the Executive Officer to return to the Board within approximately four months with proposed locomotive and rail yard rulemakings, including a regulation of non-preempted switch and medium horsepower locomotives and a designated rail yard regulation that requires risk reduction audits and plans to achieve targeted emission reduction levels; the Board will adopt such proposed regulations that it determines are technologically feasible and cost-effective.

BE IT FURTHER RESOLVED that if the Executive Officer approves staff's recommendations, and it is determined by the Executive Officer or, if appealed, the administrative appeals panel that either of the Railroads has failed to meet the commitments specified in sections 1, 2, 4, 5, and 6 of the rail yard-specific 2010 Commitments, the Board directs the Executive Officer to take other appropriate action that he deems necessary to achieve greater regulatory authority over rail yard sources, including locomotives.

BE IT FURTHER RESOLVED that if the Executive Officer approves staff's recommendations, the Board has determined that the Railroads are eligible to receive incentive funds for locomotives, including but not limited to Proposition 1B funds, to achieve the emission reductions listed in Table 1 of the 2010 Commitments that the Board has approved herein and that are in effect for the identified high-priority rail yards; however, the Railroads' commitments to achieve the emission reductions are not conditioned on receipt of public incentives.

BE IT FURTHER RESOLVED that if the Executive Officer approves staff's recommendations, the Board directs the Executive Officer and staff to report to the Board in the summer of 2012, 2014, 2016, 2018, and 2021 on the status of the Railroads' compliance with their commitment reduction targets at each of the identified high-priority rail yards for the immediately preceding compliance year.

BE IT FURTHER RESOLVED that if the Executive Officer approves staff's recommendations, the Board directs the Executive Officer to provide for a periodic independent review of the key documents and materials called for under the 2010 Commitments to evaluate the performance of the Railroads in meeting their emission reduction commitments for each compliance deadline for each high-priority rail yard, and to make the reviews available to the public and reflect them in periodic reports to the Board.

BE IT FURTHER RESOLVED that if the Executive Officer approves staff's recommendations, the Board directs the Executive Officer and ARB staff to explore technology and other solutions to continue reducing the maximum individual cancer risk over a 70-year exposure at the BNSF San Bernardino Rail Yard to a level below the 400 in million projected to remain in 2020.

BE IT FURTHER RESOLVED that if the Executive Officer approves staff's recommendations, the Board directs the Executive Officer to prepare a report by December 31, 2013 on the progress being made by locomotive manufacturers to produce Tier 4 interstate locomotives and, after consultation with the Railroads, an assessment of the potential for interstate testing of prototype locomotives to include California.

BE IT FURTHER RESOLVED that if the Executive Officer approves staff's recommendations, the Board directs the Executive Officer, by the end of 2011, to dedicate an upcoming ARB locomotive technology symposium to zero and near-zero technologies for rail yard operations and locomotives.

I hereby certify that the above is a true and correct copy of Resolution 10-29, as adopted by the Air Resources Board.

Lori Andreoni acting

Lori Andreoni, Clerk of the Board