

Date of Hearing: April 9, 2018

ASSEMBLY COMMITTEE ON TRANSPORTATION

Jim Frazier, Chair

AB 3015 (Caballero) – As Amended April 2, 2018

SUBJECT: Marine terminal operations

SUMMARY: Requires the Air Resources Board (ARB) by June 30, 2023, to develop a technical report that evaluates the cost and feasibility to transition to zero-emission cargo handling equipment (CHE) and requires the State Transportation Agency (CalSTA) when developing the 2024 state freight plan (Freight Mobility Plan) to consider ARB's technical report and address the development of freight-related infrastructure to support the introduction of zero-emission CHE at seaports and railyards. Specifically, **this bill:**

- 1) Requires ARB by June 30, 2023, to develop a technical report on the transition of zero-emission CHE that incorporates all of the following:
 - a) An evaluation of the commercially-available CHE to achieve zero-emission and near-zero-emission operations.
 - b) The cost, cost-effectiveness, and cost-benefit analysis of this commercially-available CHE.
 - c) The infrastructure required to support the operation of this commercially-available CHE.
 - d) The cost, cost effectiveness, and cost-benefit analysis of infrastructure to support the operation of this commercially-available CHE.
 - e) An evaluation of CHE to achieve zero-emission and near-zero-emission operations that is under research and development but is commercially unavailable.
 - f) An evaluation of the CHE emissions reductions achieved under the Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards Regulation (CHE Regulation), and the cost, cost effectiveness, and cost-benefit analysis of the performance of applicable rules related to cargo-handling equipment.
 - g) An evaluation of the relative benefits of introduction of zero-emission CHE at seaports and rail yards as compared to the requirements of the CHE Regulation with respect to the emissions of greenhouse gases (GHG), criteria air pollutants, diesel particulate matter, and other toxic air contaminants, and community health benefits for disadvantaged communities.
- 2) Requires ARB to consider and incorporate the findings of the technical report in all updates of the Scoping Plan occurring on and after July 1, 2023.
- 3) Requires CalSTA, when developing the 2024 Freight Mobility Plan, with respect to the development of transportation infrastructure to support the introduction of intermodal zero-emissions CHE at seaports and rail yards, to include all of the following:

- a) An identification of significant intermodal infrastructure and equipment trends, needs, and issues.
 - b) A description of freight policies, strategies, and performance measures that will guide freight-related transportation infrastructure investment decisions.
 - c) A description of how the Freight Mobility Plan will facilitate the development of the freight-related transportation infrastructure investments necessary to support the transition to zero-emission CHE.
 - d) A description of how the Freight Mobility Plan is consistent with the Scoping Plan update, the California Sustainable Freight Action Plan, and the mobile source strategy.
- 4) Requires CalSTA, when developing the aforementioned information, to convene a working group consisting of representatives of seaports, marine terminal operators, ocean carriers, waterfront labor, cargo owners, ARB, the State Energy Resources Conservation and Development Commission, the Public Utilities Commission, and air quality management and air pollution control districts.
 - 5) Requires CalSTA, when developing the 2024 Freight Mobility Plan, to consider the technical report developed by ARB.
 - 6) Requires CalSTA, when developing the 2024 Freight Mobility Plan, to consider the report developed by the California Workforce Development Board (CWDB) on the need for increased job education and training to help industry, workers, and communities' transition to economic and labor-market changes related to statewide GHG emissions reduction goals.
 - 7) Make various findings and declarations regarding California's statutes, ports, regulations, executive orders, and plans governing GHG reductions, air toxics, sustainable freight, and mobile sources of air pollution.

EXISTING LAW:

- 1) Establishes the federal Clean Air Act (FCAA), with its implementing regulations: 1) setting National Ambient Air Quality Standards (NAAQS) for six criteria pollutants, 2) designating air basins that do not achieve NAAQS as non-attainment, and 3) requiring states with non-attainment areas to submit a State Implementation Plan (SIP) detailing how they will achieve compliance with NAAQS.
- 2) Establishes ARB as the air pollution control agency in California and requires ARB, among other things, to control emissions from a wide array of mobile sources and coordinate with local air districts to control emissions from stationary sources in order to implement the FCAA.
- 3) Establishes the Global Warming Solutions Act of 2006, [AB 32 (Núñez), Chapter 244, Statutes of 2006], that requires ARB to establish programs to reduce GHG emissions to 1990 levels by 2020 including the use of market-based mechanisms (cap-and-trade) to comply with these regulations.

- 4) Requires ARB to prepare and approve a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions and to update the Scoping Plan at least once every 5 years.
- 5) Requires ARB, no later than January 1, 2018, to update the Scoping Plan, and requires all GHG rules and regulations adopted by ARB to be consistent with the Scoping Plan.
- 6) Requires ARB to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level by 2030.
- 7) Establishes the Greenhouse Gas Reduction Fund (GGRF) in the State Treasury, requires all moneys, except for fines and penalties, collected pursuant to cap-and-trade be deposited in the fund and requires the Department of Finance, in consultation with ARB and any other relevant state agency, to develop, as specified, an investment plan for the moneys deposited in the GGRF.
- 8) Requires the CWDB, in consultation with ARB, to submit a report to the Legislature, by January 1, 2019, on the need for increased education, career technical education, job training, and workforce development resources or capacity to help industry, workers, and communities transition to economic and labor-market changes related to specified statewide GHG emissions reduction goals.
- 9) Encouraged states, pursuant to the federal transportation authorization of 2012 (Moving Ahead for Progress in the 21st Century or MAP-21), to prepare state freight plans, in accordance with federal guidelines.
- 10) Requires CalSTA to develop a state freight plan in accordance with MAP-21 guidelines and establish an advisory committee made up of federal, state, local, and regional representatives as well as private sector and specified interest groups, to guide Freight Mobility Plan development.
- 11) Requires the California Transportation Commission (CTC) to allocate 60% of funds available in the Trade Corridor Enhancement Account (TCEA) for trade corridor infrastructure projects nominated by regional transportation agencies and other local agencies, with the remaining 40% of funds to be allocated by the Department of Transportation.

FISCAL EFFECT: Unknown

COMMENTS: California's sea ports of entry serve as key commercial gateways for the movement of billions of dollars' worth of products annually and overall, freight movement generates about one-third of California's \$2.2 trillion economy. However, despite the economic benefits that goods movement represents, the industry also places a heavy burden on the state in terms of the increased demand on transportation infrastructure and increased environmental impacts.

In recent years, the federal government has placed a greater emphasis on planning for and funding goods movement projects. For example, the federal government through MAP-21 specifically directed the states to create state freight plans in order to be able to be eligible for future freight funding. In response, the Legislature passed AB 14 (Lowenthal), Chapter 233,

Statutes of 2013, which directed CalSTA to develop a state freight plan in accordance with MAP-21 requirements, no later than December of 2014. AB 14 also required CalSTA to establish a freight advisory committee from a broad cross section of state, regional, local, business, and community interests involved in freight and goods movement and required that their input be solicited in the development of the state freight plan. CalSTA released the Freight Mobility Plan in 2014 and set various goals including the goal to use innovative technology to optimize the transportation system while reducing environmental and community impacts. In addition, in the plan, CalSTA recognized the importance of California's ports, the fact that ports and the maritime industry produce significant amounts of emissions, and that ports have set out strategies to reduce these emissions and improve air quality. The Freight Mobility Plan is updated every 5 years and CalSTA is currently convening freight advisory committee meetings in preparation of the upcoming 2019 freight plan.

To reduce the environmental impacts of the transportation sector including freight, and to plan freight more comprehensively, the state has enacted various laws, regulations, initiatives and executive orders.

Most notable, AB 32 requires ARB to develop a plan to reduce GHG emissions to 1990 levels by 2020 and, subsequently, SB 32 (Pavley) Chapter 249, Statutes of 2016, requires ARB to ensure GHG emissions are reduced to at least 40% below 1990 levels by 2030. AB 32 also requires ARB to prepare, and approve a Scoping Plan, to be updated every five years, to achieve the maximum technologically feasible and cost-effective reduction of GHG emissions by 2020 and AB 398 (Garcia), Chapter 135, Statutes of 2017, required ARB to update the Scoping Plan by January 1, 2018. Given that the transportation sector accounts for approximately 40% of GHG emissions, the Scoping Plan lays out various goals and efforts to reduce emissions from freight and mobile sources including to accelerate the use of clean vehicles, equipment, and fuels in the freight sector through targeted introduction of zero and near-zero emission technologies, and continued development of renewable fuels.

Through the FCAA, the federal government also requires California to meet certain air quality standards and prepare a SIP. ARB developed the *Mobile Source Strategy* as part of the SIP to attain FCAA goals for ozone and particulate matter standards, meet our ambitious SB 32 goals, reduce petroleum usage and increase energy efficiency. Currently, freight equipment accounts for about half of the statewide diesel particulate matter emissions, and approximately 45% of the statewide nitrogen oxide emissions. Reductions in freight emissions are part of this strategy.

Further, in 2015, Governor Brown issued Executive Order B-32-15, which directed key agencies to create a sustainable freight plan with the goals of improving freight efficiency, transitioning to zero-emission technologies, and increasing competitiveness of California's freight system. These key agencies adopted the Sustainable Freight Action Plan in 2016. The plan provides short and long-term goals for state agencies to consider when planning for freight sustainability.

An integral link of the freight sector is the movement of goods at sea ports and a key part of California environmental goals is to reduce emissions at these ports. In 2006, ARB established the CHE regulation to reduce emissions of diesel particulate matter (PM) and oxide of nitrogen (NO_x) from mobile CHE operating at California's ports and intermodal rail yards. The regulation requires best available control technology for new and existing CHE. CHE equipment includes all diesel-fueled equipment to lift or move containers, bulk or liquid cargo, or to perform routine or predictable maintenance and repair activities. Applicable CHE, include but are not limited to yard trucks, top handlers, side handlers, reach stackers, forklifts, rubber-tired

gantry cranes, dozers, excavators and rail-car movers. ARB estimated that by the end of 2017, this regulation would reduce emissions from diesel PM by 90% and NOx emissions by 73%. Additionally, large ports have adopted Clean Air Action Plans and in conjunction with industry stakeholders, have invested heavily in zero-emissions technologies and equipment, such as electrified cranes, battery electric trucks, and shore side electricity for vessels when at berth.

In March 2017, ARB was tasked, within 12 months, to develop concepts for an Indirect Source Rule to control pollution from large freight facilities including ports, rail yards, warehouses and distribution centers, as well as any identified alternatives capable of achieving similar levels of emission reductions, and to develop rules to further reduce pollution from ships and cargo equipment. At the March 2018 ARB Board Meeting, staff provided an informational update on the potential concepts that affected both equipment and facilities. The potential concepts, among other things, included an ARB rule to transition CHE to zero-emission and potentially implement that transition as early as 2026. No formal action was taken.

Port operations, including at berth and CHE, are eligible for state incentive funds, funds through the TCEA, and have benefited from cap-and-trade funds in the past. However, out of concerns from the labor community, the Legislature has prohibited certain funds to be used for automation or unmanned equipment technologies. Under the TCEA, the state can fund projects at ports that enhance capacity and efficiency but restrict this funding for projects that include the purchase of fully-automated CHE. The state has also restricted GGRF funds as well; for example, in 2017, the Legislature appropriated \$140 million from the GGRF to fund clean freight equipment including projects for ships at berth but prohibited funding to be used for automation.

The issue of job displacement as we transition to cleaner technologies is a recurring one that the state needs to address. For these reasons, AB 398, which extended cap-and-trade provisions, required CWDB in consultation with ARB, to submit a report to the Legislature, by January 1, 2019, on the need for increased job education related to the state's GHG emissions reduction goals. This report has not been finalized.

According to the author, this bill was introduced to facilitate the long-term planning for the zero- and near-zero-emissions technologies and investments at California's public seaports by harmonizing multiple existing, successful state planning frameworks, plans, and policy initiatives. The author states, "Transitioning to ZE/NZE at our seaports will be complex, expensive, economically risky, and encompasses multiple policy considerations. There is general consensus amongst state regulators, the port authorities, industry, environmentalists, labor, and transportation advocates that it will eventually occur. How the transition will occur, however, is currently subject to considerable debate. There is pressure to update existing regulations quickly, to force technology transition to existing mature ZE equipment. But without building new infrastructure, and identifying financial resources for both infrastructure and equipment prior to that, there is no basis for the use of this equipment.

Moreover, existing labor concerns have led the Legislature to agree to limitations on the availability of state incentive funds for both equipment and infrastructure, further limiting short-term feasibility for the use of zero emission equipment. The high costs and high stakes involved in this transition will not stop the introduction of new technology at the ports, but it makes the planning for its successful introduction imperative. All parties need to be involved in the development of the plans, financing alternatives and deployment of technology, and new training requirements so that the transition to zero- and near-zero equipment at the ports is sustainable, cost effective, and successful."

Writing in support and as the sponsor, the Pacific Merchant Shipping Association assert, “AB 3015 would require the development of plans to facilitate win-win investments in our seaports, which will improve competitiveness and help grow cargo and jobs, while also transitioning to a zero- emissions equipment environment. Among other things, AB 3015 will ensure these plans be developed in consideration of 1) a full, complete, and technical evaluation of the potential technologies which exist, 2) the costs and economic feasibility of the introduction of these strategies, 3) a realistic timeline for the development of the infrastructure needed to support the new equipment, and 4) a discussion amongst all stakeholders.”

Double referral: This bill will be referred to the Assembly Natural Resources Committee should it pass out of this committee.

Previous legislation: AB 398 (E. Garcia), Chapter 135, Statutes of 2017, extended the cap-and-trade program established pursuant to AB 32, with modifications, required ARB to update the scoping plan and among other things, required the CWDB to develop a report on job training related to the state’s GHG emission goals.

AB 134 (Assembly Budget Committee), Chapter 254, Statutes of 2017, appropriated \$140 million for freight equipment projects from GGRF, but prohibited these funds to be used for the purchase of fully automated cargo handling equipment.

SB 103 (Senate Budget and Fiscal Review), Chapter 103, Statutes of 2017, required CTC using the TCEA to fund freight transportation infrastructure projects, but restricted these funds to be used for the purchase of fully automated cargo handling equipment.

SB 32 (Pavley), Chapter 249, Statutes of 2016, required ARB to ensure that statewide GHG emissions are reduced at least 40% below 1990 levels by 2030 and required ARB to update the Scoping Plan.

AB 14 (Lowenthal), Chapter 223, Statutes of 2013, required CalSTA to develop a Freight Mobility Plan.

AB 32 (Núñez), Chapter 488, Statutes of 2006, required ARB to develop a plan of how to reduce emissions to 1990 levels by the year 2020, established the cap-and-trade program, and required ARB to develop a climate change scoping plan.

REGISTERED SUPPORT / OPPOSITION:

Support

Pacific Merchant Shipping Association (Sponsor)

Opposition

None on File

Analysis Prepared by: Cynthia Alvarez / TRANS. / (916) 319-2093