



ASSISTANT ADMINISTRATOR FOR AIR AND RADIATION

WASHINGTON, D.C. 20460

May 15, 2024

MEMORANDUM

SUBJECT: General Applicability Public Interest Waiver of Section 70914(a) of P. L. 117-58, Build America, Buy America Act, 2021 for U.S. Environmental Protection Agency Financial Assistance Awards under the Clean Ports Program – DECISION MEMORANDUM

FROM: Joseph Goffman
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Introduction

The U.S. Environmental Protection Agency (EPA) is committed to implementing Build America, Buy America (BABA) to cultivate the domestic manufacturing base for a range of products, consistent with Executive Order 14005.¹ This waiver will allow Clean Ports Program grant recipients to efficiently introduce a wide variety of commercially available zero emission technologies in port-related freight and passenger operations as the market for these same technologies grows in the U.S. Based on market analysis conducted by the EPA and the U.S. Department of Energy (DOE), certain currently available zero emission mobile port equipment does not meet BABA's manufacturing requirements. Specifically, while many types of mobile equipment are manufactured in the United States, the United States does not yet have sufficient production capacity for batteries or fuel cells for heavy duty vehicles. DOE analysis indicates that sufficient domestic battery manufacturing for heavy duty highway vehicles should be available starting in 2027, while other cargo handling equipment may not meet BABA requirements due to limited domestic battery production until 2030.

Summary

For purposes of this general applicability public interest waiver, the EPA is issuing a targeted, time-limited partial waiver for certain zero emission (battery electric and hydrogen fuel cell) mobile port equipment to be funded in the \$3 billion Clean Ports Program from the BABA requirements in Section 70914 of the Infrastructure Investment and Jobs Act. Industry input and interagency research indicates that certain zero emission mobile port equipment that are considered eligible technologies under the

¹ Executive Order 14005: Ensuring the Future is Made in All of America by All of America's Workers, Section 70914 of Infrastructure Investment and Jobs Act establishes government-wide Buy America conditions on public infrastructure projects funded by federal financial assistance awards obligated on or after May 14, 2022.

Clean Ports Program do not meet the BABA requirements for manufactured products. To be considered “produced in the United States” under BABA, manufactured products must be manufactured in the United States, and the cost of the components mined, produced, or manufactured in the United States must be greater than 55 percent (55%) of the total cost of all components of the manufactured product.

The EPA is finalizing a waiver that specifies:

- 1) The 55% domestic content requirement is waived for certain types of “zero emission mobile port equipment” (defined below in the “Waiver and Market Analysis” section). This equipment must still be manufactured in the United States to be considered “produced in the United States” during the waiver period.
- 2) Clean Ports Program funding recipients may also apply a supplemental de minimis waiver, waiving BABA compliance on fifteen percent (15%) of material costs associated with the purchase of mobile equipment that may be used for recipients of the Clean Ports Program only on mobile port equipment, except for the purchase of cranes.

This waiver applies to expenditures incurred on or after the effective date of the final waiver for zero emission mobile port equipment that meets each of the following criteria: the contracted order date for the equipment is on or before December 31, 2027; the contracted delivery date for the equipment is on or before December 31, 2028; and the equipment is delivered no later than July 1, 2029, with the exception of yard trucks and ship-to-shore cranes, where the domestic content waiver provisions and timelines differ as described in the 55 Percent Domestic Content Waiver Provision section below.

Prior to the expiration of this waiver, the EPA may consider extending the delivery date requirement beyond July 1, 2029, on an-award-by-award basis for zero emission equipment that otherwise meets these criteria but for which the equipment delivery is delayed due to unanticipated supply chain issues or other factors. Based on feedback received in comments and discussions with Original Equipment Manufacturers (OEMs), the U.S. Department of Transportation (DOT), DOE, and other federal partners, the EPA is finalizing a waiver that reflects a balance between the Clean Ports Program’s priorities of expediting improved health and environmental outcomes for near-port communities and expanding the supply base and continuing increased use of zero emission port equipment.

Waiver and Market Analysis

The Office of Management and Budget’s (OMB) October 25, 2023, M-24-02 memorandum, “Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure” provides guidance to agencies to consider whether it is in the public interest to waive application of a Buy America preference “where an agency determines that other important policy goals cannot be achieved consistent with the Buy America requirements established by BABA and the waiver would not meet the requirements for a nonavailability or unreasonable cost waiver.” This waiver is in the public interest to ensure Clean Ports Program grant recipients can effectively carry out the EPA-funded activity in a timely manner, support existing domestic manufacturers as battery and fuel cell production comes online, accelerate emissions reductions in the communities near ports, and to build the foundation for port decarbonization while promoting domestic port equipment manufacturing. Market research conducted by the EPA, DOT and DOE

indicates that manufacturers for certain types of mobile port equipment do not currently meet the BABA requirement that equipment is manufactured in the United States and/or that the cost of the components mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components, nor are manufacturers presently able to manufacture enough zero emission port equipment in the United States to meet the demand of the Clean Ports Program.

Ports are a vital part of the United States economy, serving as gateways for moving freight and passengers across the country and around the world. Ports are also places with high concentrations of complex mobile source equipment, including drayage trucks, locomotives, cargo-handling equipment, and marine vessels. Today, this equipment is largely powered by diesel and other fossil fuels and contributes to significant emissions of criteria air pollutants and greenhouse gases. Ports also operate older medium- and heavy-duty equipment that emits significant amounts of air pollution, which negatively impacts human health and the environment, especially in port-adjacent communities.

The EPA's Clean Ports Program was established by the Inflation Reduction Act of 2022 (Section 60102) to fund zero emission port equipment and infrastructure to reduce mobile source emissions of criteria pollutants, air toxics, and/or greenhouse gases at U.S. ports. Zero emission equipment funded under this program includes electric and hydrogen fuel-cell powered equipment and related infrastructure only. This new funding program builds on the EPA's Ports Initiative, an ongoing program that helps our nation's ports, a critical part of our infrastructure and supply chain, address near-term public health and environmental impacts to surrounding communities. The Clean Ports Program will award grants with a four-year period of performance.

In May 2023, the EPA issued a Request for Information (RFI) to gather more information on the availability of zero emission technologies in the heavy-duty vehicle and port sectors, receiving over 100 unique comments.² The comments received on technology availability and domestic manufacturing indicated that the current and near-term supply of BABA compliant domestic, zero emission, mobile port equipment is limited and insufficient to meet the anticipated demands of the grant program. Many respondents identified batteries or fuel cells as the main challenge with respect to meeting BABA requirements, but some respondents also noted the current use of domestic iron and steel in manufacturing this equipment.

In addition, the DOE conducted market analysis in February 2024 on the current state of manufacturing of zero emission port technologies. The DOE has a substantial history of working with ports, freight stakeholders, and technology manufacturers related to low and zero emission freight vehicles and equipment through its Vehicle Technologies Office and its Clean Cities and Communities partnership. The DOE has issued multiple grants to help develop and demonstrate zero emission port equipment. Recent DOE research evaluated the market availability of Class 7 & 8 on-road battery electric and hydrogen fuel cell drayage trucks, battery electric and fuel cell electric specialty yard trucks (also known as terminal tractors, yard tractors, or yard hostlers) for on port terminal operation, and other cargo handling equipment. Research was conducted through market analysis by the National Renewable Energy Lab (NREL) and by directly contacting equipment and truck manufacturers.

² <https://www.regulations.gov/document/EPA-HQ-OAR-2023-0216-0001>

The DOE found that most electric drayage trucks, zero emission yard trucks, and other zero emission cargo handling equipment do not currently meet BABA requirements for 55 percent domestic content for manufactured products. The analysis indicated that drayage truck manufacturers would likely begin to meet the BABA content requirement starting in 2027 while other equipment, such as yard trucks and other cargo handling equipment may not meet BABA requirements until 2028.

An analysis of battery cells and modules shows that a significant share of current battery manufacturing in the U.S. is for light-duty original equipment manufacturers, and these batteries are largely not available to drayage truck and cargo handling equipment manufacturers. The first U.S. medium- and heavy-duty specific battery cell plant is scheduled to start production in 2027.³

55 Percent Domestic Content Waiver Provision

Based on the market research described above and comments on the proposed waiver described below, the EPA is finalizing a partial, time-limited waiver of the 55% domestic content requirement for manufactured products for certain zero emission mobile port equipment eligible to be funded under the Clean Ports Program listed below, with a phased approach for yard trucks (also known as terminal tractors, yard tractors, or yard hostlers) as well as ship to shore cranes. The zero emission mobile port equipment funded under the Clean Ports Program must still be manufactured in the United States.

For the purposes of this 55% domestic content waiver, “zero emission mobile port equipment” is defined as the following:

- Zero emission cranes including:
 - Rubber tire gantry cranes
 - Mobile harbor cranes
 - Rail-mounted gantry cranes
 - Automatic stacking cranes
 - Ship-to-shore cranes
- Other zero emission cargo handling equipment including:
 - Bulk cargo handling equipment
 - Containerized cargo handling equipment
 - Straddle Carriers
 - Mobile shore power cable management systems
- Zero emission class 3-8 vehicles, including:
 - Drayage trucks
 - Yard trucks (also known as terminal tractors, yard tractors, or yard hostlers)
- Zero emission locomotives, including:
 - Switch locomotives
- Zero emission vessels, including:
 - Tugboats
 - Push boats
 - Pull boats
 - Ferries

³ [A \\$2-3 billion battery factory for electric trucks is headed to Mississippi \(electrek.co\)](https://www.electrek.co/2022/05/12/a-2-3-billion-battery-factory-for-electric-trucks-is-headed-to-mississippi/)

While the majority of the zero emission mobile port equipment from the list above will be covered by the full length of the waiver (as described in the Summary section above) the 55% domestic content waiver provision will be phased out sooner for yard trucks (also known as terminal tractors, yard tractors, or yard hostlers). The 55% domestic content waiver provision will apply to expenditures incurred on or after the effective date of the final waiver for yard trucks that meet the following criteria: the contracted delivery date for the yard trucks is on or before December 31, 2026; and the equipment is delivered no later than July 1, 2027.

Additionally, ship-to-shore (STS) cranes where installation commences on or before December 31, 2026, must meet a 25% domestic content requirement; STS cranes where installation commences on January 1, 2027, and thereafter must achieve full BABA compliance.

Further, specific cargo handling equipment will be fully excluded from the waiver of the 55% domestic content requirement. Based upon feedback received in comments and discussions with OEMs, there appears to be an adequate supply of certain BABA compliant zero emission container handlers, reach stackers, and heavy forklifts, as listed below, to meet Clean Ports Program and other port customers' needs during the period of project performance for the Clean Ports Program. Should federal grant recipients find that specific cargo handling equipment on this list is not available or does not meet their needs, project-level nonavailability waivers remain an option. The zero emission cargo handling equipment that are excluded from the waiver of 55% domestic content requirement are:

- Battery electric (BE) heavy forklifts 36,000lbs 24" & 48" Load Center (L.C.)
- BE heavy forklifts 55,000lbs 48" L.C.
- BE heavy forklifts 65,000lbs 48" L.C.
- BE heavy forklifts 92,500lbs 48" L.C.
- BE heavy forklifts 100,000lbs 48" L.C.
- BE loaded top-pick container handler (up to 6-high-stack and 90,000lbs)
- BE empty side-pick container handler (up to 8-high stack and 20,000lbs)
- BE reach stacker (up to 5 high stack and 99,000lbs)

Supplemental De Minimis Waiver Provision

In addition, the EPA is also finalizing a supplemental de minimis waiver waiving BABA requirements (i.e., domestic content requirement for manufactured products and domestic manufacturing requirement) on fifteen percent (15%) of material costs associated with the purchase of mobile equipment that may be used for recipients of the Clean Ports Program only on mobile port equipment. The EPA is excluding the use of this supplemental de minimis waiver for the purchase of cranes. The Biden-Harris Administration recently issued an Executive Order to bolster the security of the nation's ports and a commitment to invest through the Bipartisan Infrastructure Law and the Inflation Reduction Act over \$20 billion into U.S. port infrastructure.⁴ The exclusion of cranes is also consistent with the goal of rebuilding the U.S.'s industrial capacity to produce port cranes. At least two OEMs are planning to onshore U.S. manufacturing capacity for their ship-to-shore and rubber tire gantry crane production in the near-term.

⁴ <https://www.whitehouse.gov/briefing-room/statements-releases/2024/02/21/fact-sheet-biden-harris-administration-announces-initiative-to-bolster-cybersecurity-of-u-s-ports/>

The EPA's existing public interest De Minimis waiver allows up to 5 percent of total project cost to be used on items that are not required to demonstrate compliance with BABA requirements; this existing 5 percent waiver will remain applicable to the Clean Ports Program. Through this notice, the EPA is waiving BABA requirements for an additional 15 percent of the total material costs associated with zero emission mobile port equipment, that recipients may only use to purchase zero emission mobile port equipment (other than cranes) that do not meet domestic manufacturing requirements in this waiver (i.e., are not domestically assembled and do not meet domestic content requirements for manufactured products).

As an illustrative hypothetical example, for a \$100M grant where \$60M is to be spent on mobile equipment, the EPA's existing de minimis waiver could be used to waive BABA requirements for up to \$5M in cost for infrastructure or mobile equipment items, and the supplemental waiver could be used to waive BABA requirements for an additional \$9M in cost of non-domestic zero emission mobile port equipment (other than cranes), for a total of \$14M in items for this project that would not be required to demonstrate compliance with BABA domestic requirements. Depending on how much of the existing agency-wide De Minimis Waiver is used to waive items for fixed infrastructure, the other \$46M in mobile equipment purchases would be required to meet the domestic manufacturing requirements in this waiver (i.e., must be domestically manufactured).

General Waiver Analysis/Justification

The EPA is committed to working with the Departments of Energy and Transportation, equipment manufacturers, U.S. ports, and other stakeholders regarding long-term efforts to establish domestic mobile port equipment manufacturing.

The EPA believes this waiver is necessary to ensure that the existing manufacturing base can be supported while manufacturing capacity for batteries and fuel cells come online. It will also support recipients of Clean Ports Program technology grants to advance critical emission reduction initiatives at ports by deploying decarbonization and clean air projects to benefit port-adjacent communities across the country as soon as possible and help meet this Administration's international climate commitment to reduce greenhouse gas pollution 50-52% by 2030. The waiver also incentivizes companies to invest in the domestic production of zero emission port equipment.

The purpose of this waiver is to ensure Clean Ports Program grant recipients can effectively carry out the EPA-funded activity in a timely manner, support existing domestic manufacturers as battery and fuel cell production comes online, accelerate emissions reductions in the communities near ports, and build the foundation for port decarbonization while promoting domestic port equipment manufacturing. The EPA believes that the limited duration of this waiver provides an incentive to manufacturers to invest in increasing domestic capacity, while the waiver itself ensures a sufficient supply of mobile port equipment available for Clean Ports Program projects in the near term. Project-level waivers remain an option for grant recipients should the provisions established by this waiver prove inadequate.

This waiver applies only to expenditures incurred on or after the effective date of the final waiver, for zero emission mobile port equipment that meets each of the following criteria: the contracted order date for the equipment is on or before December 31, 2027; the contracted delivery date for the equipment is on or before December 31, 2028; and the equipment is delivered no later than July 1, 2029, with the exception of yard trucks, where the 55% domestic content waiver is phased out earlier.

This zero-emission mobile port equipment waiver does not apply to any fixed infrastructure, including but not limited to charging or hydrogen fueling infrastructure for zero emission port equipment, such as electric vehicle charging equipment and shore power technology. In addition, as further discussed in the Notice of Funding Opportunity for the Clean Ports Program, recipients may not use program funds to purchase cranes manufactured by entities owned by, controlled by, or subject to the direction of a government of a foreign country of concern, or by entities that are headquartered in a foreign country of concern, as determined by the EPA.

Anticipated Program Impacts Absent a Waiver

Build America, Buy America covers more than 70 EPA programs. The agency is committed to robust implementation of the Act's Buy America Preference in an efficient and effective manner. Based on market research, conducted by the EPA through a Request for Information and research done by DOE and DOT, the EPA determines that applying the BABA requirements for manufactured products to the specific zero emission mobile port equipment listed in this waiver would be inconsistent with the public interest.

Failure to issue this waiver would delay significant emissions reductions in near-port communities facing health consequences from air pollution. This waiver also takes into consideration the impact of and overlap in demand for equipment and components from other BIL and IRA programs that fund battery electric and hydrogen fuel cell equipment. Heavy duty commercial trucks for various applications are frequently built on a common chassis that is then modified by a separate company that builds the rest of the vehicle. Zero emission port equipment, including drayage trucks, yard trucks (also known as terminal tractors yard tractors, or yard hostlers), and other types of cargo handling equipment will share the limited supply of heavy-duty battery packs and control systems with other zero-emitting heavy-duty vehicles. As the domestic supply of these heavy-duty components, such as battery packs and EV drivetrains, grows it will be shared across vehicle types and is more likely to first serve the demand from higher volume on-road heavy-duty vehicles and require more time to meet the demand for specialty zero emission port equipment.

Assessment of Cost Advantage of a Foreign-Sourced Product

Under section 70921(b)(2) of the IJIA and OMB Memorandum M-24-02, agencies are expected to assess "whether a significant portion of any cost advantage of a foreign-sourced product is the result of the use of dumped steel, iron, or manufactured products or the use of injuriously subsidized steel, iron, or manufactured products" as appropriate before granting a waiver. The EPA's analysis has concluded that this assessment is not applicable to this waiver, as this waiver is not based on the cost of foreign-sourced products. The EPA will perform additional market research as it implements the Clean Ports Program to better understand the market and to limit the use of waivers caused by dumping of foreign-sourced products.

Stakeholder Engagement

The EPA will continue to engage with partners and other stakeholders in coordination with the Made in America Office, the DOE, DOT, and other federal agencies regarding the progress of the domestic port equipment manufacturing industry. The EPA is setting up a supplier scouting request with the National Institute of Standards and Technology's Manufacturing Extension Partnership to provide continuous market research through their national network of domestic manufacturers and suppliers.

Comments on the Proposed Waiver

On March 25, 2024, the EPA issued a notice proposing to issue this waiver and the comment period was open until April 15, 2024, more than 15 days as required by the OMB guidance. The Agency received 54 comments during the public comment period from a variety of stakeholders, including port associations, port operators, and manufacturers, as well as other stakeholders and program participants. During the 21-day comment period, seventy-six percent (76%) of the 54 commenters supported the EPA's public interest waiver for certain zero emission mobile port equipment. After reviewing these comments, the EPA concludes that the information provided generally supports retaining the 55% domestic content waiver, with the exception of certain types of cargo handling equipment, and replacing the term "final assembly" with "manufactured". Ports expressed concern about their ability to ensure that manufacturers provide compliant products, and no OEMs provided sufficient data for the EPA to determine independently that their products would meet the 55% requirement. Port authorities and other port operators also referenced the lack of official BABA certification for port equipment in their comments. Port authorities and other port operators supported a limited waiver of the domestic content requirements in the near term to allow more time for the domestic market to mature while making it possible to procure equipment needed to reduce emissions at ports. Further, the undefined term "final assembly" in the proposed waiver generated confusion among commenters. As such, the EPA has dropped the use of a new term "final assembly" and instead uses the term "manufactured in the United States" in a manner consistent with the language in 2 CFR 184.3. For the remainder of comments received, the final waiver reflects changes to address these comments, including increasing the supplemental de minimis to 15%, clarifying applicability for mobile shore power cable management systems, and clarifying the waiver timeframe with respect to order and delivery dates. Additionally, commenters also provided information indicating that certain types of cargo handling equipment would be able to meet domestic manufacturing and content requirements before the expiration of the proposed waiver, so we have excluded some from the domestic content requirement (certain forklifts, container handlers, and reach stackers) and phased out the waiver for yard trucks (also known as terminal tractors, yard tractors, or yard hostlers) earlier than other equipment types.

Port operators expressed concern in their comments with the uncertainty of BABA compliance or that products are only produced by a non-domestic supplier for their specific needs. In the final waiver, the EPA is increasing the supplemental de minimis level to 15% of material costs attributable to zero emission port equipment to address this concern. The availability of a supplemental de minimis will provide grant applicants and recipients additional certainty and flexibility regarding availability of zero emission port equipment, recognizing the increasing demand for these products in the port industry more broadly. The EPA encourages grant recipients to seek out domestic suppliers prior to using the supplemental de minimis to maximize the use of domestic equipment. Several comments shared that mobile shore power cable management systems are not currently manufactured domestically and

urged that the waiver be clarified that it covers this key mobile equipment component. They expressed that without these vital components, shore power deployments funded by the Clean Ports Program will be severely limited, undercutting the program's goal of addressing port emissions and associated impacts on often low-income and disadvantaged near-port communities and the Administration's Justice40 goals. Therefore, the EPA clarified in the final waiver that mobile shore power cable management systems are covered under the supplemental de minimis as they meet the definition for mobile port equipment.

The EPA also received conflicting comments regarding the dates in the waiver. Some commenters raised concerns about basing the waiver on a delivery date, which risks unfairly penalizing applicants and manufacturers for supply chain issues that are outside of their control, while other commenters argued that the proposed waiver duration was too long. The final waiver is a compromise that addresses these conflicting comments by extending solely the delivery date. As such, the waiver retains a delivery date, but adjusts the dates to reflect the period of performance and acknowledges that timing can be extended on an as needed basis to address delivery delays.

Labor groups generally expressed opposition to any version of a waiver. The EPA plans to work with these groups to support domestic manufacturing during and beyond this time-limited waiver to ensure the program is supporting high-quality, good-paying American jobs wherever possible.

Several commenters indicated that their grant applications would ideally include the purchase of zero-emission cranes, yet cranes were proposed to be excluded from the supplemental de minimis waiver. While there was general consensus by the commenters that no OEMs are domestically producing cranes at scale today, the EPA is maintaining the language in the proposed waiver that the purchase of cranes is excluded from the supplemental de minimis waiver. This final waiver decision was based on information provided by OEMs that confirmed that their production of cranes can meet the requirements and available demand within grant performance periods. Cranes are still eligible for the EPA's De Minimis Waiver, subject to the restriction in the Clean Ports Program Notice of Funding Opportunity on buying cranes from foreign countries of concern (as discussed in the General Waiver Analysis/Justification section above), and a waiver of some domestic content requirements. Further, grant applicants also have the option to request a project-level nonavailability waiver for cranes, if necessary.

WAIVER DECISION

Section 70914(b)(2) of the *Infrastructure Investment and Jobs Act* authorizes the Administrator to waive the requirements of BABA if implementation is inconsistent with the public interest and market research indicates the materials and products subject to the preference are not produced in the United States at a sufficient and reasonably available quantity or satisfactory quality. The EPA is issuing a time-limited waiver for specific mobile port equipment in the Clean Ports Program. This waiver applies to all awards obligated on or after the effective date of this waiver under the Clean Ports Program. This waiver applies to expenditures incurred on or after the effective date of the final waiver, for zero emission mobile port equipment that meets each of the following criteria: the contracted order date for the equipment is on or before December 31, 2027; the contracted delivery date for the equipment is on or before December 31, 2028; and the equipment is delivered no later than July 1, 2029, with the exception of yard trucks and ship-to-shore cranes, where the domestic content waiver provisions and timelines differ as described in the 55 Percent Domestic Content Waiver Provision section above.

The EPA reserves the right to modify, shorten the duration of, or discontinue the final waiver if it obtains information indicating that U.S.-made mobile ports equipment is available in sufficient quantity to meet the demands of Clean Ports Program funding recipients. The EPA will continue to coordinate with the Department of Transportation to assess the state of the port equipment manufacturing industry and any pertinent information received from manufacturer engagement efforts.

Questions about this memorandum should be directed to BABA-OTAQ@epa.gov