

DEPARTMENT OF THE INTERIOR
Bureau of Reclamation
and
The U.S. Environmental Protection Agency

General Applicability Non-Availability Waiver
Build America, Buy America Product Waiver: AMI Water Meters

1. Summary

Agency: Department of the Interior (DOI/Department)'s Bureau of Reclamation (USBR) and the U.S. Environmental Protection Agency (EPA)

Final Waiver: The Department is joining the EPA to issue a partial general applicability/nonavailability waiver of the requirements of section 70914 of the Build America, Buy America Act included in the Infrastructure Investment and Jobs Act (Pub. L. No. 117-58) for Advanced Metering Infrastructure (AMI) water meters used in infrastructure projects funded through USBR and the EPA, while requiring certain components of the water meters to be manufactured in the United States according to the phased implementation schedule below. This waiver is in effect for three (3) years from the date of approval. DOI and the EPA are implementing a phased approach during the waiver period, whereby, for two years from the date of approval, purchases of AMI meters and all components (the entire "manufactured product") are waived. Two (2) years from the date of approval, AMI meter housings shall be domestically manufactured or produced and excluded from the waiver scope; all other components continue to be waived through the end of the three-year period. This waiver only applies to products purchased after the effective date of this waiver and may not be used for products purchased after the expiration date of the waiver. At the conclusion of the full three-year waiver period, DOI and the EPA expect AMI water meters to be manufactured in the United States and their total cost of components to be greater than 55 percent domestically manufactured or produced.

Waiver type: Nonavailability of domestic products

Waiver level: General Applicability, Product level waiver

Waiver justification summary: There are no AMI water meters manufactured in the United States meeting BABA's 55 percent total cost of components domestic content requirement.

Length of the waiver: This waiver is in effect for three (3) years from the date of approval. DOI and the EPA are implementing a phased approach during the waiver period, whereby, for two years from the date of approval, purchases of AMI meters and all components (the entire "manufactured product") are waived. Two (2) years from the date of approval, AMI meter housings shall be domestically manufactured or produced components and will be excluded from the waiver scope. This waiver only applies to products purchased after the effective date of this waiver and may not be used for products purchased after the expiration date of the waiver.

Summary of items covered in the waiver:

- AMI water meters.

NAICS: 334514
PSC: 6632

2. Background

The Buy America Preference set forth in section 70914 of the Build America, Buy America Act included in the Infrastructure Investment and Jobs Act (Pub. L. No. 117-58), requires all iron, steel, manufactured products, and construction materials used for infrastructure projects under Federal financial assistance awards be produced in the United States.

Under section 70914(b), a Federal agency may waive the application of the Buy America Preference, in any case in which it finds that: applying the domestic content procurement preference would be inconsistent with the public interest; types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality; or the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent. All waivers must have a written explanation for the proposed determination; provide a period of not less than 15 calendar days for public comment on the waiver; and submit the waiver to the Office of Management and Budget Made in America Office for review to determine if the waiver is consistent with policy.

3. Description of Covered Items

Manufactured products: AMI water meters collect water usage information. When used as a fixed network across a community, AMI water meters automatically collect and store consumption data, aiding in water conservation and water use efficiency, improved water management, and energy savings. Information provided helps identify high water usage that could indicate leaks, providing time sensitive leak detection alerts. AMI water meter networks reduce water demand by enhancing conservation, reduce energy use/operating costs, and reduce carbon emissions using remote/automated meter reads.

AMI water meters are composed of meter housings, end points/transmitters, printed circuit boards, meter electronics, batteries, base stations, repeaters and associated equipment. Based on market research completed within the last two years, some manufacturers source the materials for the meter housings domestically. A few manufacturers indicated that their meter housings are 100 percent manufactured or produced within the United States. However, the industry universally sources the end points/transmitters, printed circuit boards, meter electronics, and batteries internationally. As these components are the most expensive parts of the water meter, the meter system as a whole does not meet BABA's 55 percent of total cost of components domestic content requirement.

Based on the market research described below, there are currently no AMI water meters manufactured domestically that meet BABA requirements.

4. Waiver Justification

Based on cumulative and collaborative market research efforts, DOI and the EPA are issuing a three-year waiver split into two phases. In the first phase, a waiver shall be provided for two years from the date of approval to cover AMI meters and all their components. Two (2) years

from the date of approval, AMI meter housings shall be a domestically manufactured or produced component, but other AMI water meter components will continue to be waived. At the conclusion of the three-year waiver period, DOI and the EPA anticipate that AMI water meters (i.e., bundled with their component parts) will be available as a manufactured product with 55 percent or more of the components domestically manufactured or produced.

This waiver's purpose is to incentivize production of BABA compliant AMI water meters. Based on stakeholder feedback, DOI and the EPA have identified that significant challenges prevent AMI water meters from being BABA compliant. However, with appropriate market signals, AMI water meters could be BABA compliant by the expiration of the waiver. DOI and the EPA are seeking this waiver specifically to send the appropriate market signals to the AMI water meter manufacturing community. DOI and the EPA's expectation is that AMI water meters be BABA compliant. This waiver identifies a realistic phased pathway for domestic manufacture of these products, first by targeting the domestic manufacture of meter housings, with the second phase for the remaining components of an AMI water meter that are not currently available to be manufactured or produced within the United States. As an incentive, while this waiver is active, manufacturers may still receive the benefit of Federal funding by providing products to be used under Federal awards, with the phased approach rewarding those manufacturers that take advantage of the waiver period to transition to domestic content.

Anticipated impact if no waiver were issued: DOI's USBR provides annual funding for the competitive Water and Energy Efficiency Grant (WEEG) program, which regularly funds AMI water meter projects. As no BABA compliant AMI water meter is available, there is no alternative but for these projects to be covered by a product or project waiver. In FY23 alone, USBR's WEEG program competitively selected water meter grants totaling \$43 million Federal and \$90 million non-Federal funding. This \$134 million investment is expected to result in an annual water savings of over 20,000 acre-feet. Based on historical data, the EPA anticipates that at least 10 percent of all EPA funded water infrastructure projects will purchase and install AMI water meters. The majority of these will occur through the State Revolving Fund, the Water Infrastructure Finance and Innovation Act program, and other funding programs. As no BABA compliant AMI water meter is available, there is no alternative but for these projects to be covered by a product or project waiver.

In the absence of this waiver, DOI, the EPA, and the Federal grant-making community will miss an opportunity to clearly articulate expectations for creating a domestically manufactured or produced market to the AMI water meter manufacturing community. This could have the impact of slowing the long-term domestic sourcing transition, and curtailing Federal participation in AMI water meter projects, which would weaken support for communities throughout the West that are struggling to conserve their declining water supply.

Market Research to Justify Product Non-Availability Waiver: From 2022 through 2024, DOI, the EPA, and grant recipients conducted market research to assess the availability of domestically manufactured AMI water meters. As a result of this cumulative market research, there is no known manufacturer of AMI water meters, that meet BABA's domestic production requirements.

All manufacturers responsive to market research inquiries stated that they are in the process of evaluating the idea of moving manufacturing to the U.S., but have no immediate plans or timeframes identified. As there are upwards of fifty (50) components to an AMI water meter system, evaluating the domestic sourcing of the manufactured product as a whole through the component cost break down is a significant effort. Should key high-cost components of an AMI water meter be manufactured within the U.S. in the future, this could lead to a domestically produced manufactured product meeting the 55 percent BABA requirement.

DOI and the EPA considered whether an AMI water meter waiver could target certain components, such as the internal electronics and end points, rather than the AMI water meter as a whole. Transmitters, printed circuit boards, meter electronics, batteries, and end points used within AMI water meters were identified as the components most difficult to source domestically. Market research feedback has indicated that one component of the AMI meter -- the meter housings -- are manufactured domestically by several manufacturers. However, BABA-compliant water meter housings are not available immediately in sufficient quantities to meet demand, nor are they universally compatible. This waiver, through the phased approach, reflects market research and public comments confirming that water meter housing components can be manufactured domestically within two years. DOI and the EPA also considered whether this waiver could be targeted to AMI water meters below a size threshold but found no evidence to support targeting specific size thresholds.

To gain additional industry feedback on materials used in water infrastructure products, such as AMI water meters, the EPA published a Request for Information (RFI) *Request for Information Regarding Products and Categories of Products Used in Water Infrastructure Programs* in the Federal Register on November 20, 2023, which closed on December 20, 2023, EPA-HQ-OW-2023-0396-0001). The RFI requested feedback detailing domestic materials sourcing, market readiness, other product supply considerations, and whether water infrastructure products are manufactured in the U.S. The EPA and DOI examined the 12 comments that provided feedback on the domestic availability of water meters.

In general, commentors to the RFI noted that manufacturers need time to assess, design, develop, and test new lines of domestically produced products consistent with BABA requirements. Component changes on manufactured goods require re-evaluation periods to reduce major issues in manufacturing. This includes establishing new domestic production facilities, new BABA compliant lines of domestic products, and staffing for the new facilities. Commenters also reported significant concerns with stocking burdens, customer communication issues, and production capacity issues. Commenters noted that there are significant issues related to the domestic sourcing of electronics. Commenters note that there is no support to offset the foreign procurement of the electronics. One commentor shared that they were unlikely to meet the BABA domestic component sourcing requirements within five years, as the effort requires a significant time and funding investment.

Given that it is not possible for all future funded AMI water meter projects to source the meter housings from the few domestic sources, (for the above described compatibility and market lead times concerns), DOI and the EPA are issuing a time-limited three-year phased waiver, in which all components of the water meter product are waived in phase one. This initial, two-year phase

of the waiver covers all components of the AMI smart meter to provide an opportunity for manufacturers to assess the sourcing of their meter housings and transition to a domestic supply for that component. The second phase of this waiver, which begins two (2) years from the date of approval, extends waiver coverage to components of the AMI water meter except the meter housing, for the third of three years, whereby AMI water meter housings will be required to be domestically manufactured at that time.

DOI and the EPA consider this waiver to provide a significant market signal and time for manufacturers to analyze current issues and develop strategies to create domestically manufactured or produced products that are consistent with BABA requirements. This will also give time to assess, design, develop, and test new lines of the domestic products. Responses to the EPA's RFI were generally consistent with the feedback DOI had previously received.

DOI and the EPA consider this waiver's incentive-based approach to be appropriate and fair for both manufacturers that have manufactured or produced some of their AMI water meter components domestically and those that have not prioritized a domestic supply of components prior to the enactment of the Infrastructure Investment and Jobs Act, sometimes referred to the Bipartisan Infrastructure Law. Manufacturers not sourcing their components domestically will have sufficient and reasonable time to reassess, plan, and implement changes. Manufacturers currently sourcing some of their products domestically will have sufficient and reasonable time to source the high-cost components of AMI water meters domestically. While the industry as a whole manages this transition, DOI and the EPA may continue to fund projects to conserve and efficiently use water resources through the use of AMI water meters. An analysis will be required immediately prior to the conclusion of the waiver period to identify how the AMI water meter industry has shifted in response to changing market conditions.

Expectation for the agency, award recipients, and industry at the conclusion of the waiver: DOI and the EPA expect to continue to engage in conversations with grant recipients and other Federal agencies to encourage the AMI water meter manufacturing industry to meet the 55 percent of total cost domestic content requirement for BABA compliance.

DOI and the EPA will review this waiver annually to assess whether it remains necessary. DOI and the EPA may, based on the results of that review, terminate, or narrow the scope or duration of this waiver, or take such other action deemed as appropriate.

5. Assessment of Cost Advantage of a Foreign-Sourced Product

Under OMB Memorandum M-24-02, Federal 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 public interest waiver. DOI and 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.

6. Summary of Public Comments

The waiver received sixteen (16) public comments over the thirty (30) day publication period from August 30, 2024 through September 28, 2024. Five (5) municipal water authorities, four (4) manufacturing entities, three (3) state revolving fund programs, two (2) water infrastructure associations, one (1) national manufacturing association, and one (1) consulting engineer submitted comments. None of the comments opposed the waiver, in general. Most comments included detailed information for consideration, all of which were substantive. While commenters expressed support for the waiver generally, many raised concerns with aspects of the waiver including the phasing and overall duration, component specificity, nomenclature, and scope.

Many commenters requested the waiver duration be extended beyond the three years proposed, noting that additional time appears necessary to scale up and build production for the potential demand cited in the proposal. DOI and the EPA considered the comments regarding waiver duration and determined that the points raised did not warrant extension beyond the proposed three-year duration. Market research for this waiver identified several domestic manufacturing entities that have made recent investments in domestic manufacturing, and comments to the waiver confirm that increasing domestic supply will be available nearing the end of the waiver period. Extension of the waiver beyond three years may disincentivize potential investment and expansion of the developing domestic sources. Before the conclusion of the waiver, DOI and the EPA will re-evaluate the conditions of supply chains for water meters. Should domestic availability continue to be a concern and the identified domestic manufacturing base is unable to ramp up production to meet expected demand, the expiring waiver will be re-considered.

Comments also asked for clarification on the timing of the waiver phases, noting that the language in the proposal caused some confusion about the sequence of the phases whereby some commenters interpreted the total waiver time period as five years, which was not the intent of the proposal. This final waiver includes adjusted language to clarify the phases of the waiver, as follows: The first phase, which is two (2) years in duration, covers AMI meters and all their components. Two (2) years from the date of approval, AMI meter housings shall be a domestically manufactured or produced component, but all other components continue to be waived for the final year of the waiver. The total duration of the waiver is three (3) years.

Several comments expressed concerns with terminology used in the waiver, including references to water meter "bodies" and "resins," in addition to requesting clarification regarding the components of a water meter manufactured product. The consensus of comments recommended changing "bodies" to "housings" to clarify and avoid confusion, a change which is reflected in the final waiver. Additionally, comments recommended striking "resins" from inclusion in the components list describing typical water meter products, noting that the resins are typically input materials that are used to produce components (such as meter housings), and therefore are not directly incorporated into the final manufactured product. The term "resins" has been removed from the final waiver. The final waiver does not, however, include any other changes in reference to the components of a water meter product. DOI and the EPA examined the comments and while the consensus of comments requests delineation of all known, specific components of a water meter product, or to refer to the products as "systems," the final waiver is unchanged from the proposal in this aspect. Several comments noted that the technologies can differ

significantly across brands and models, and that products are evolving rapidly. In order to avoid confusion and mischaracterization of product types, the final waiver retains the example list of water meter product components (such as meter housings, end points/transmitters, printed circuit boards, meter electronics, batteries, base stations, repeaters, and associated equipment), noting that components can differ depending on the water meter system in use or the needs of specific projects. DOI and the EPA view this list of components as a reasonable instructive example of what comprises a water meter manufactured product.

The waiver requested comments regarding the substitutability and compatibility of meter housings and meters from different manufacturers. Six (6) commenters responded that AMI water meters from different manufacturers are not compatible without loss of “AMI” features. One (1) commenter shared that intermingling components would likely void product warranties. DOI and EPA, therefore, consider it important to provide sufficient time and appropriate phasing of this waiver to encourage a market-wide domestic sourcing transition.

The waiver requested comments regarding a potential domestic assembly requirement, to which two (2) commenters responded substantively. One (1) commenter requested expanding the timeframe of the waiver significantly in order to include a domestic assembly requirement after four (4) years. Another commenter responded noting that they could presently domestically assemble a portion of the projected national supply for AMI water meters and could expand that domestic assembly capability to a larger portion (though far less than half of the total) of the demand with further investment, but the timing for the expansion was not provided. While DOI and the EPA appreciate the manufacturing entities' encouraging efforts toward domestic assembly, and strongly recommend recipients to utilize domestically assembled water meters when available, comments did not indicate market readiness for domestic assembly across the industry. The comments did not address or remove concerns that including a domestic assembly requirement within the three-year waiver period would alleviate existing supply chain issues. In light of many comments received emphasizing compatibility issues for municipal projects, the evidence for domestic assembly sourcing to supply the wide range and full projected needs of recipient projects does not warrant inclusion of an assembly requirement during the waiver period.

The waiver applies coverage at the point of purchase. Several comments requested that the final waiver include a change or further clarification to the applicability point for the acquisition of water meters. DOI and the EPA consider the purchase date stipulation to be a clear signal point of waiver applicability for manufacturers and a workable definition for recipients and oversight authorities. Other commenter suggested reference points could create confusion between manufacturers and recipients, ultimately undermining the waiver intent and potentially inviting noncompliance through misapplication of the waiver. The EPA has demonstrated success from past national waivers with the use of purchase date as the waiver applicability point, providing clarity for manufacturers, financial assistance recipients (including sub-recipients), and compliance oversight authorities.

Several comments requested expansion of the waiver to include other types of flow meters beyond AMI water meters. DOI and the EPA are not expanding the waiver to include additional meter types at this time. Although the comments shared supply chain concerns for additional

meter types, the information available does not provide sufficient detail to support expansion of the waiver. DOI and the EPA will continue to evaluate supply chains for these products and may examine future waiver actions based on additional market research or project-specific waiver requests.

Multiple commenters requested the waiver apply to projects with AMI water meter projects already underway, noting that supply chain issues identified in the waiver apply to current activity equally as to future purchases. DOI and the EPA acknowledge that active water meter projects that have already received federal financial assistance for AMI smart water meters are not within the scope of this waiver, noting that extension of this waiver for these situations would "retroactively" apply the waiver, a policy prohibited through M-24-02. If a project has concerns or uncertainty about the status of their project relative to this waiver, DOI and the EPA recommend that projects contact the appropriate funding authority to discuss the specifics of ongoing projects.

For more information on the Buy America Preference, please reference www.doi.gov/grants/buyamerica or MadeinAmerica.gov and www.epa.gov/cwsrf/build-america-buy-america-baba.