

Department of Environmental Protection

Waste Reduction Innovation Grant Response to Questions

June 16, 2025

Questions about the Waste Reduction Innovation Grant (WRIG) were due June 2, 2025. Below are MassDEP's responses to those questions. Applications are due by July 15, 2025 at 11:59 P.M. E.T.

Questions Regarding Eligible Activities

<u>Q</u>: Would Massachusetts based contract manufacturing expenses qualify under "equipment and other capital costs" in both categories?

<u>A:</u> To be eligible for WRIG, an applicant must have a location in Massachusetts at the time of contracting and all grant awards should provide a direct, measurable economic benefit to Massachusetts. Any equipment funded by MassDEP must be used exclusively in Massachusetts and must remain in the state and be used for its funded purpose. In addition, an applicant must be a company or corporation (for-profit or non-profit) properly licensed to do business in the Commonwealth at the time of contracting, including being registered with the Secretary of State's office. Manufacturing activities, which include those activities that manufacture products with materials that are separated and diverted from solid waste disposal, are considered an eligible activity.

<u>Q</u>: Would the purchase of containers be eligible for the Waste Reduction Innovation Grant as a capital investment?

<u>A:</u> The purchase of containers for collection activities is not an eligible expense.

Q: Presently each container is inspected by hand individually. We are working on an Artificial Intelligence driven system to inspect each container. We are presently working on a prototype to inspect cups as we feel these are the most challenging. We have made significant progress building a test unit and proving that it can work. Unfortunately, it is slow and will need to be upgraded to a conveyor style unit that can accommodate all container styles at a higher speed. This would allow us to have a more consistent inspection process across all shifts and container styles. Would this project be eligible for the Waste Reduction Innovation Grant?

<u>A</u>: If the project is for reusable cups, that is not an eligible material under Category 2. This type of project could be eligible under Category 1, as long as the application is for an eligible activity and eligible expenses.

<u>Q</u>: Can businesses that do not physically process waste or any other materials apply for this grant? If so, what should we put in the application answers, such as 'facilities job roles' or 'exact tonnage increases' where it isn't a known, accurate value, given there are too many variables?

<u>A:</u> See "Eligibility Requirements" on page 2 of the <u>Grant Guidelines</u>. Activity requirements include processing activities, manufacturing activities, and reuse activities for both categories, and application or technology for Category 1. An entity that does not physically manage materials consistent with the eligibility requirements would not be eligible under Category 2.

<u>Q</u>: I am hopeful that you can help clarify whether our project would qualify under Category 1. High Level Overview of Pilot:

- The project we are scoping is to pilot a large-scale weekly food recovery of 6-12 pallets of fresh produce. Food would be recovered and transported to cold storage and then fully distributed by Monday morning to a network of healthcare and nonprofit partners for the purpose of nourishing people.
- We would use funds to cover mostly human capital costs, and the intent of this pilot would be to demonstrate larger scale food recovery frameworks for the purpose of food donation in the state of MA.

Does the project scope seem like it could fit? I noticed that you called out "Collection and hauling activities," as non-eligible, but our project is a diversion pilot for the purpose of nourishing MA residents facing food insecurity.

<u>A:</u> Collection or hauling activities are not eligible for WRIG funding. To be eligible, this project would need to request funding for an eligible activity and expenses under the Category 1 eligibility guidelines, excluding collection and hauling.

Q: Our technology leverages a high temperature and high-pressure chemical reaction (Super-critical water oxidation coupled with Hydrothermal mineralization) so it would be considered a thermal technology, even though it does avoid a lot of the issues faced by other thermal reactions such as Pyrolysis or incineration. Our process indeed works with wet waste (doesn't require the drying process) and is the only process providing a thermodynamically favorable path to sequester carbon. We wanted to validate that such thermal technology would be eligible for this innovation grant.

<u>A:</u> Recovering energy from the combustion of a material or creating a fuel, with the exception of activities defined as "conversion" in 310 CMR 16.02, are considered to be ineligible activities.

<u>Q</u>: We are considering applying to the Start Up and Pilot Projects (Category 1). However, we would qualify as having "demonstrated success outside of bench-scale laboratory environments and are ready to move from development to commercialization" only by late 2026/early 2027, when the project would start running. Our technology is indeed at TRL 3, as we have demonstrated bench-scale proof of concept as of now. By early 2026, we aim at being at TRL5 and start designing an "outside of lab" pilot equipment, for a first real environment pilot implementation in 2027 - also corresponding to the first commercialization step. We wanted to validate whether this development stage would be acceptable to apply to this grant?

<u>A:</u> MassDEP cannot make a determination as to whether you should apply. Read the "Eligibility Requirements" in the <u>Grant Guidelines</u> to determine if you're eligible. For Category 1, MassDEP is seeking applications for innovations that have demonstrated success outside of bench-scale laboratory environments and are ready to move from development to commercialization.

<u>Q</u>: We are a Massachusetts-based startup. Our team is developing an advanced sortation system to increase recycling efficiency and reduce landfill waste. Having completed our lab-scale work, we are now building our first pilot-scale prototype. To advance toward commercialization, we are seeking support to acquire key equipment (such as a shredder) and fund technical work to validate system performance. Could you kindly confirm whether Category 1 is appropriate for a project at our stage of development?

<u>A</u>: MassDEP cannot make a determination as to whether you should apply. Read the "Eligibility Requirements" and review the "Evaluation Criteria" in the <u>Grant Guidelines</u> to determine if you're eligible.

<u>**Q**</u>: How does MassDEP define "innovative" for the purposes of this grant? Are pilot projects using emerging but not-yet-commercial technologies eligible for commercial use?

<u>A:</u> For Category 1, MassDEP is seeking applications for innovations that have demonstrated success outside of bench-scale laboratory environments and are ready to move from development to commercialization. For Category 2, MassDEP is seeking applications for capital projects for new equipment or technology that are not prevalent in the Commonwealth to expand recovery, reuse, and recycling operations.

<u>Q</u>: Would a project focused on improving recycling infrastructure for e-waste or mixed plastics sorting fall within the intended scope of Category 1?

<u>A:</u> Yes, if the application is for an innovation that has demonstrated success outside of benchscale laboratory environments and is ready to move from development to commercialization. The application would need to meet all other Category 1 eligibility requirements.

<u>Q</u>: Are software-based or AI-driven waste management tools eligible if they directly support measurable waste reduction, diversion, or material value recovery?

<u>A:</u> Yes, for Category 1. The activity is considered an application or development of technology and, therefore, meets the Category 1 activity requirements.

<u>**Q**</u>: Is early-stage R&D infrastructure eligible under Category 2, or is funding limited to operational deployment?

<u>A:</u> Funding for Category 2 is for capital infrastructure, specifically new technology or equipment that is not prevalent in the Commonwealth. This category aims to invest in capital projects that will make significant infrastructure changes to enable diversion of waste at scale. Early-stage R&D infrastructure would not be eligible for Category 2.

<u>Q</u>: How does MassDEP define "commercialization?" Does achieving a functional pilot and site validation count, or is revenue generation expected during the grant term?

<u>A:</u> By commercialization, MassDEP means projects that are ready to progress from research and development to operating commercially. There is no specific revenue requirement, however applicants should consider all of the evaluation criteria in the <u>Grant Guidelines</u>. In this context, the criteria relative to potential market impact, feasibility, and sustainability are particularly relevant.

<u>**Q**</u>: What is considered an acceptable designated facility site under the grant, assuming equipment use is exclusive to the project and remains in Massachusetts?

<u>A:</u> The applicant must have a location in Massachusetts at the time of contracting and all grant awards should provide a direct, measurable economic benefit to Massachusetts. Any equipment funded by MassDEP must be used exclusively in Massachusetts and must remain in the state and be used for its funded purpose. In addition, the applicant must be a company or corporation (for-profit or non-profit) properly licensed to do business in the Commonwealth at the time of contracting, including being registered with the Secretary of State's office.

<u>Q</u>: After the project is completed in Massachusetts, is my company allowed to reuse the equipment at another location outside of Massachusetts?

<u>A:</u> No. As stated in the <u>Grant Guidelines</u>, any equipment funded by MassDEP must be used exclusively in Massachusetts and must remain in the state and be used for its funded purpose.

<u>Q</u>: Does installing AI cameras at a MRF to determine capture rate of recyclables and testing intervention measures to enable capturing more materials meet the "Activity Requirements" of the grant since the technology is only providing data?

<u>A</u>: Yes, the activity is considered an application or development of technology and therefore meets the activity requirements for Category 1 only.

Q: As part of the decommissioning process for ACs and Dehumidifiers, several of our technicians would need to become Type II certified in freon removal as per the Section 608 EPA guidelines. As the Massachusetts certification locations do not offer Spanish or remote testing, we will incur a certification fee to ensure that our owner and several key technicians will be certified. We believe this would be considered a licensing cost, which is not specifically noted under the eligible grant expense. Would this be considered a capital cost and eligible to be included in the grant? As an additional question regarding the EPA 608 certification process and integral to this proposed pilot project, would we be able to complete the technician certification process ahead of the April 2026 grant award beginning? In terms of efficacy, completing this certification for our technicians will be key to launching the pilot project within the eighteen-month window. If so, could this certification process be included in total)?

<u>A</u>: Licensing and certification cost is not an eligible activity for Category 1 and 2 funding. The matching contribution must be for eligible expenses as defined for the applicable grant category.

Questions Regarding Eligible Entities

Q: We are a tech company from California that works with several universities across the country who use our AI-powered solution to progress towards zero waste. Would we be qualified to apply for this grant if we partner with a local university and share a letter of recommendation? Are there any other criteria?

<u>A:</u> To be eligible for WRIG, an applicant must have a location in Massachusetts at the time of contracting and all grant awards should provide a direct, measurable economic benefit to Massachusetts. Any equipment funded by MassDEP must be used exclusively in Massachusetts

and must remain in the state and be used for its funded purpose. In addition, an applicant must be a company or corporation (for-profit or non-profit) properly licensed to do business in the Commonwealth at the time of contracting, including being registered with the Secretary of State's office. The applicant could subcontract with or purchase equipment from other entities outside of Massachusetts.

<u>Q</u>: Are municipalities eligible to apply, especially for proposing a novel program or policy? <u>A:</u> Municipalities, government entities, are not eligible to apply for a WRIG grant.

Q: As a company that specializes in innovative robotic and "smart" technology for use in enhancing haulers' ability to provide waste diversion at scale, are we eligible for this grant? (our activity expands recovery considerably, particularly for crowded, narrow urban areas with significant trash). Since we are located outside of Massachusetts, would partnering with a local recycler enable us to apply for this grant? Do you have any specific advice for such partnerships?

<u>A:</u> Collection or hauling activities are not eligible for either category under WRIG. To be eligible for WRIG, an applicant must have a location in Massachusetts at the time of contracting and all grant awards should provide a direct, measurable economic benefit to Massachusetts. Any equipment funded by MassDEP must be used exclusively in Massachusetts and must remain in the state and be used for its funded purpose. In addition, an applicant must be a company or corporation (for-profit or non-profit) properly licensed to do business in the Commonwealth at the time of contracting, including being registered with the Secretary of State's office. The applicant could subcontract with or purchase equipment from other entities outside of Massachusetts.

<u>Q</u>: Are startups with limited operational history but external investment considered competitive? <u>A</u>: Please refer to the evaluation criteria in the <u>Grant Guidelines</u> for how MassDEP will evaluate applications.

Questions Regarding Category 1 Eligibility

<u>Q</u>: We are a startup currently operating in Boston and Michigan, focusing on developing disruptive organic waste processing technology. We are seeking funding to optimize our minimum viable product (MVP) and would be applying under Category 1: Start Up and Pilot Projects. Given our stage of development, the innovative nature of our technology, and its potential impact on waste reduction in Massachusetts, we would appreciate your insight on whether pursuing a WRIG application would be a worthwhile endeavor for our company.

<u>A:</u> MassDEP cannot make a determination as to whether you should apply. Read the "Eligibility Requirements" on page 2 of the <u>Grant Guidelines</u> to determine if you're eligible.

Questions Regarding Eligible Materials

<u>Q</u>: Our applications will be non-sewered toilets for both permanent and temporary installations including toilets installed in non-sewered buildings and modular construction; evaporative porta-potties; zero-discharge alternatives to septic tanks; and portable toilets for transportation and military vehicles.

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Given that our toilet targets sewage waste and also converts much of the waste back into pure molecular water (vapor), as well as eliminating the need for toxic chemicals and reduces collection frequencies drastically, are we a fit for this grant?

<u>A:</u> The Waste Reduction Innovation Grant excludes sewage waste and associated nutrient recycling processes since it is not a material that is typically diverted from solid waste disposal.

<u>Q</u>: Are you giving grants for an expanded polystyrene (EPS)/Styrofoam manufacturer/recycler?
<u>A</u>: Styrofoam is not an eligible material for Category 2 grants. However, if you meet the Category 1 eligibility requirements for material, activity, and expenses you could apply under Category 1. Read the <u>Grant Guidelines</u> for more information.

Q: While urine doesn't fall under the definition of solid waste provided, we know our system and technology is an important waste innovation strategy for municipalities facing nutrient pollution. Urine by volume is only 1% of what enters waste streams, but can account for 90% of nitrogen and 80% of phosphorus. Those nutrients create dangerous effects when wastewater treatment plants aren't able to remove them properly, or when septics get old and leaky, which is happening all over the state regularly resulting in closed beaches and polluted waterways. Our urine-to-fertilizer program helps Nitrogen Sensitive Areas (NSA's) as defined under Title V regulations to meet their nutrient removal needs as we remove this high impact waste and recycle it. Our nutrient recycling solution would benefit from DEP grants like this. Please let us know if it is possible to make an exception or if there are other opportunities to work with DEP to scale these alternatives. We'd be happy to connect further about this waste innovation; please let us know if a conversation with our team would be helpful.

<u>A:</u> This type of project would not be eligible for a WRIG grant. Please consult the MassDEP website at <u>https://www.mass.gov/info-details/water-resources-grants-financial-assistance</u> for other possible grant opportunities.

Q: Would foam from mattresses be considered an eligible material?

<u>A</u>: An applicant may apply for Category 1 funding for any material that is diverted from solid waste disposal. Mattresses are not an eligible material for Category 2 funding.

<u>Q</u>: Fats, oils and greases are often diverted to landfills after trap grease pumping and dewatering. I did not see them listed as grant "materials," but they are certainly a landfill nuisance.

<u>A</u>: An applicant may apply for Category 1 funding for any material that is diverted from solid waste disposal. Fats, oils and greases are not an eligible material for Category 2 funding.

<u>Q</u>: Would hard to recycle single use lab plastics qualify as an eligible material for Category 2? <u>A</u>: Hard to recycle single use lab plastics are not an eligible material under Category 2.

<u>Q</u>: Could you confirm that using wet organic waste as an input (e.g. food waste, sewage sludge) is considered eligible for this innovation grant?

<u>A:</u> Only materials that are diverted from solid waste disposal are eligible for the Waste Reduction Innovation Grant. Food waste would be considered eligible under Category 1, but not Category 2. Sewage sludge is not considered an eligible material under either Category. **<u>Q</u>**: My plan is to do black top & concrete demo plus wood stump, brush, wood lodge. All these will be resold; does this qualify for the grant?

<u>A:</u> The eligible materials for Category 2 include: C&D materials including but not limited to wood, gypsum wallboard, and asphalt shingles (but not mixed C&D processing). Applications to manage mixed construction wastes are not eligible.

<u>Q</u>: If our project involves a new material stream not listed in Category 2, can we still apply under Category 1 by making a strong case for innovation and market need?

<u>A:</u> Yes, if your application meets all Category 1 eligibility requirements.

<u>Q</u>: Is there a preference for Massachusetts-based material feedstock sources? Are out-of-state sources allowed if the processing and benefits occur within the state?

<u>A:</u> All grant awards should provide a direct, measurable economic benefit to Massachusetts. While it is not required to source materials solely from Massachusetts, projects that accept material from Massachusetts sources would typically provide greater benefits to Massachusetts.

<u>Q</u>: We are not certain exactly which reclaimed materials would be a fit for any given future project, so we would like to propose a curated list of 4-6 material type options that projects could choose from. Is this acceptable?

<u>A:</u> For Category 1 projects, any material that is diverted from solid waste disposal is eligible. In considering an application, applicants should review the evaluation criteria in the <u>Grant</u> <u>Guidelines</u>. To apply for Category 2 funding, the application must be for a material eligible under Category 2.

Questions Regarding Budget and Match

<u>Q</u>: Is there any flexibility on the match requirement for a small business pursuing a public benefit project?

<u>A:</u> There is no flexibility on the minimum match requirement.

<u>Q</u>: For Category 1 projects, the guidelines outline the budget conditions, specifying a maximum grant of \$100,000 with a minimum financial match of 25 percent. We are confused about how the match is calculated. Specifically, we will propose this project with a total budget of \$130,000. If we request \$100,000 from MassDEP, and the applicant provides a \$30,000 match, will this fit in the budget conditions?

<u>A</u>: A request of \$100,000 from MassDEP would require a minimum match of \$25,000. A \$30,000 match would meet the minimum grant requirement.

<u>Q</u>: How does the 25% minimum financial match requirement work? Specifically, how should we interpret the evaluation question: "Does the applicant exceed the minimum match requirement?"

<u>A:</u> For Category 1 projects, a minimum financial match of 25 percent is required. For example, the minimum match for a \$100,000 grant request would be \$25,000. For Category 2 a minimum financial match of 50% is required. So, for example, the minimum match for a \$1 million grant

request would be \$500,000. An applicant would exceed the minimum match requirement, if they propose a grant match larger than the minimum grant match requirement.

<u>Q</u>: Can in-kind contributions (e.g., staff time, donated space, existing equipment, consultant time) count toward the required match?

<u>A</u>: The matching contribution must be for eligible expenses as defined for the applicable grant category.

Questions Regarding Completing the Application

<u>Q</u>: What level of quantitative data or projection is expected to demonstrate "waste reduction potential" or "increase in material value" (e.g., modeled estimates, third-party benchmarks, internal projections)?

<u>A:</u> MassDEP does not specify the data sources for "waste reduction potential" or "increase in material value." As specified in the Certification Statement on the Grant Application Form, the information should be true, accurate, and complete to the best of the applicant's knowledge. The applicant should explain how the increased waste reduction potential and increase in material value will be achieved. Applicants should consider the evaluation criteria described in the <u>Grant Guidelines</u>.

<u>Q</u>: Should the project timeline be formatted visually (e.g., a Gantt chart), or is a written list with dates sufficient?

A: A written list with dates is sufficient.

<u>Q</u>: Would describing anticipated market pathways and including letters of interest be acceptable in place of formal contracts at this stage?

<u>A:</u> Formal contracts are not required. In providing this information, the applicant should consider the evaluation criteria listed in the <u>Grant Guidelines</u>.

<u>Q</u>: Are there preferred methods for demonstrating commitment to diversity, equity, and EJ (e.g., workforce development, local partnerships, hiring practices)?

<u>A</u>: The applicant should include all relevant and responsive information to address the Environmental Justice population investments evaluation criteria specified in the grant application.

<u>Q</u>: Our technology is designed to improve statewide waste systems, including those serving EJ communities, though we do not serve residents directly. Would describing systemic benefits for EJ populations (e.g., reducing local waste burdens, improving recycling access) fulfill the intent of this evaluation criterion?

<u>A:</u> The applicant should include all relevant and responsive information to address the Environmental Justice population investments evaluation criteria specified in the grant application.

<u>Q</u>: The nature of our proposal (material reuse) makes it nearly impossible for us to identify a specific project that times out perfectly relative to the milestones of the grant application, including application

due date, winner announcement date, and grant sunset date. We would like to propose instead a plan to recruit specific projects that can be identified, onboarded and completed within the 18-month timeline. Will this approach be acceptable?

<u>A</u>: Please refer to the evaluation criteria for how applications will be evaluated and what information should be provided. Applicants must complete the proposed project within the required timeline from the time of full contract execution (up to 18 months for Category 1 awards and up to 36 months for Category 2 awards).