

Town of Coventry Materials Management Infrastructure Grant Application

Project Name: Coventry Transfer Station Aerated Static Pile Composting Facility

The Following sections have been prepared in accordance with the application guidelines as presented in the MMI Request for Applications

1. The Town proposes the creation of an Aerated Static Pile (ASP) composting facility at the Town's Transfer Station Located at 100 Olsen Farm Road, a parcel owned by the Town (as shown in "*Coventry Composting System Draft Plan.pdf*"). Trees will be cleared, and wiring will be run from the existing public works facility to supply electricity. The facility will consist of several components behind the Transfer Station to allow for the composting of leaves and food waste collected by public works staff from Coventry residents. The facility will be constructed using an ASP design, where a series of perforated pipes will be attached to a blower and air will be forced into the pile to allow for composting with comparatively minimal mechanical turning. Pipes will be made of a material suitable for geothermal use such that they will not be damaged by the high temperature during the composting process. Several simple storage areas for compost will be constructed using concrete blocks, which will allow for separating compost at different stages of the process, such as raw food waste, carbon-rich materials like leaves and woodchips, and finished compost. A mechanical screening machine has also been included in the project plan in order to filter compost at the end of the process and provide a higher quality end product. The facility will serve all of Coventry's ~12,235 residents. This proposed project will begin the process of separating food waste in town and diverting both this and leaves from the municipal waste stream.
2. The Town of Coventry, as with many municipalities within the state, is faced with increasing waste disposal costs. These costs have increased by as much as ~15% in recent fiscal years, with further fee increases expected in the future. These costs were in excess of \$500,000 for fiscal year 2024 in disposal fees alone. The Town has an obligation to be a responsible steward for public funds, and provide services to residents at a reasonable cost. If these increasing disposal costs are not offset, residents may face an increased tax and fee burden to manage expenses. The Town has investigated other options for food waste disposal, but they were found to be logistically and economically infeasible. After conducting research, including visiting an operating municipal ASP composting site within the state, the Town believes this will be a cost efficient approach to creating and supporting a lasting alternate stream for food waste disposal within the Town. The location at the Town's Public Works facility was selected due to available space, and proximity to the location Town residents already dispose of waste, in turn facilitating easy transport of food waste and leaves.
3. The proposed location for the project at 100 Olsen Farm Road within the Town of Coventry is owned by the Town, and no further steps are required to achieve site control.
4. The proposed plan will divert food waste as well as leaves and other yard trimmings in order to serve as the inputs for composting. The Town paid to dispose of ~3,952 tons of

waste in 2023, and though the exact makeup of this waste was not recorded, EPA estimates suggest food waste composes roughly ~25% of residential waste, with other components like yard trimmings bringing the total amount of compostable waste to ~30%. The Town does not currently have a food waste diversion system in place, but based on results from other communities, the Town is planning to divert ~5% of incoming waste eligible for composting within a year of the project's completion, with the goal of increasing this rate further with continued outreach to residents.

5. The feasibility of the proposed plan has been reviewed based on information from the Town's Public Works Department, state and federal resources, and from discussions with other communities. Based on this information the Town is confident in the basic operation of the facility. The primary concern to the feasibility of the park is the lack of an existing food waste program among town residents. To overcome this, the Town proposes additional expenditures alongside the grant in order to support community adoption. Though the Town recognizes these costs are not eligible for reimbursement under the MMI grant program, they are considered to be essential for project implementation. The Town plans to allocate \$5,500 to purchase ~600 countertop food waste bins and offer them to residents at a greatly reduced cost. This will cover roughly ~12% of Coventry's ~5,000 households. Compostable bags will also be made available to help further ease this transition. In addition, the Town plans to use those funds to host a seminar for Town residents, and create informational materials to ensure residents are aware of the food waste collection program and its operation.
6. The proposed additions under this project are displayed in the attached draft site plan titled *Coventry Composting System Draft Plan.pdf*. As described above, construction will consist of several key components, including several storage areas for materials in different stages of the compost process, a screener, and areas for the ASP composting process. These will be accompanied by wiring and tree-clearing as necessary to prepare the location.
7. While the Town currently has no food waste collection program, leaves are currently collected at the Public Works Facility, and scales and employees are present on site which would allow for weighing and collection of any food waste. By placing the composting facility at the same location it makes efficient use of Town resources with regards to property, but also simplifies any waste collection by centralizing the process at one location.
8. The project as proposed would create a facility designed to serve all ~12,235 residents. The number of residents who use the program will vary based on adoption of food waste separation. Finished compost will be made available to all town residents at no charge.
9. The Town of Coventry is not an Environmental Justice community and does not contain any affecting environmental justice facilities as identified by DEEP. The composting program is planned to be accessible to all Town residents regardless of background or financial status. Accompanying the program, informational materials and finished

compost will be provided to residents without cost and countertop bins will be provided at a significantly reduced rate.

10. Upon being collected by Town residents, food waste will be weighed and tracked to measure the weight in tons of waste diverted via the program. In turn, savings can be estimated based on disposal fees from the Town's waste disposal contractor. Temperature of compost and qualitative descriptions of the process will be collected and recorded regularly to submit to measure effectiveness of the process and submit to the DEEP as required.
11. Operating costs to the Town are expected to be minimal. Based on discussions with the Town's Public Works Director, existing staff at the Town's public works facility can absorb the new labor without the need for additional employees. There may be a minor increase to costs associated with increased electrical use from the system and maintenance, but given the intermittent nature of the blower and screener the impact is likely to be small. Depending on the success of encouraging adoption of food waste separation among residents additional funding may also be necessary.
12. The amount of funding requested is \$202,895.87. This amount is expected to cover all expenses for the purchase and construction of the composting facility as described. For more details see attached document *Coventry Compost System Draft Costs.xlsx*. The project will be supplemented by additional funds in the amount of \$5,500 to support broad adoption of a food waste diversion program. As described above, these funds will be used to fund the creation and distribution of informational materials, and the purchase of countertop bins and compostable bags to be distributed to Town residents at a reduced rate.
13. The total timeline for the project is expected to be ~6.5 months from when funds are made available. Proposed installation of components is relatively simple, and is expected to take place in the summer of 2025 after ordering, planning, and permitting in the beginning of the year. For more details see the attached schedule *Coventry Compost System Draft Project Schedule.xlsx*. Once operational the project will likely take over a year to reach full functionality as Coventry residents continue to adopt and adjust to food waste separation.