Work Plan for Solid Waste Infrastructure for Recycling (SWIFR) Grants for States and Territories State of Missouri

State/Territory Point of Contact:

Name	Angie Powell
Title	Mo. Market Development Director
Phone	573/522-0328
Email	Angie.powell@eiera.mo.gov
Address	425 Madison Street, 2 nd Floor
	Jefferson City, MO 65102

Total Amount Requested: \$572,065

Period of Performance: October 1, 2023 through September 30, 2026

Section 1. Project Summary and Overall Approach

The purpose of this award is to enhance the State of Missouri's efforts to meet the SWIFR grant elements. To accomplish this we are proposing an update to our 2005 Missouri Solid Waste Management Plan that addresses the current landscape for the recycling industry, market conditions, etc. The updated plan will include a new **Missouri Market Development Plan** and a **Sustainable Organic Materials Management Plan**. This will support state-led implementation plans to advance post-consumer materials management.

A. Background and Description of Existing Program:

Missouri recognized a need for its growing solid waste management issues, and the state legislature responded with the passage of Senate Bill 530 in 1990. Senate Bill 530, among other things, contained several important components:

- Instituted a landfill ban for yard waste, white goods, waste oil, and whole tires.
- Called for the creation of regional solid waste management districts and created a dedicated solid waste management fund to finance the regulatory management and oversight of the solid waste industry in the state.

One of the other provisions of SB 530 was the creation of the Missouri Market Development Program (MMDP) under the Environmental Improvement and Energy Resources Authority (EIERA). The mission of the MMDP is to promote the development and maintenance of markets for recovered materials. One of the ways this is accomplished is by providing financial assistance to Missouri businesses to purchase equipment to create products from recovered materials and/or process recovered materials into other value-added feed stocks. One of the goals in obtaining the SWIFR funding is to better analyze and plan for the development of end markets, identify remaining gaps for end markets as well as address needs in rural areas for market development of recyclable or recoverable materials that are currently destined for landfills. This opportunity will further enhance the reach and effectiveness of the MMDP's mission.

Other current programmatic information regarding Missouri's solid waste management planning activities and operations are detailed below and were included in our January "Five Programmatic Questions" response.

1. Legislation in place that mandates solid waste management planning or a waste characterization report:

Missouri passed legislation in 1990 under Senate Bill 530, which includes among other provisions, the development of a statewide solid waste management plan; however, it did not include a provision for a waste characterization study or for any required updates or amendments to the plan. The statute can be found at the following link: (RSMo. 260.225.4).

- The most current <u>Missouri Solid Waste Management Plan</u> was developed in 2005, and has not been updated or amended since that time.
- RSMo. 260.300 called for the Missouri Department of Natural Resources (MDNR) to develop a plan to
 divide the state into separate solid waste management districts. <u>RSMo. 260.325</u> then required each of
 those 20 solid waste districts to develop a comprehensive waste management plan; however, this was later
 determined to be an unfunded mandate by the courts and could not be enforced by the state.

2. Depth and breadth of a state's data collection efforts:

The MDNR Waste Management Program (WMP) established a method that calculates waste disposal diversion percentages by obtaining annual tons collected in Missouri for disposal (disposed of in-state or out-of-state) and then divides this number by the total tons of materials estimated to have been generated within the state. Currently the tonnage for landfilled waste is reported to the WMP on a quarterly basis. Missouri does not require nor mandate any type of reporting for recycling, composting or waste diversion activities.

Grants administered by the state's 20 solid waste management districts are required to provide diverted tonnages which are then reported to the WMP. It is important to note that data captured are strictly from entities that have a current grant open with one of the solid waste management districts. The grant related data is currently retained by the Waste Management Program.

The 20 solid waste management districts compile an "assessment Inventory" every two years. The assessment inventory is a basic list of entities providing recycling services and what types of materials they currently accept, hours of operation, etc. Solid waste district staff research the internet, make telephone or email inquiries to obtain as much data as possible. This information is then provided to the WMP and the information is housed in https://recyclesearch.com/profile/mo-directory/materials.

<u>Barriers/Challenges</u> – No reporting (other than landfill tonnages) is required unless it is associated with a solid waste management grant related to the districts. Entities are not forthcoming with information even when using third-party consultants to gather this data. More resources need to be directed toward meaningful data collection and reporting.

There are challenges in obtaining accurate and timely disposal tonnages from in-state and out-of state facilities, which may have led to disposed tonnages being duplicated or otherwise incorrectly included in the calculation. Furthermore, estimating the total amount of material generated within the state may not accurately depict actual generation rates, thus potentially providing an inaccurate baseline from which diversion calculations are performed.

3. Waste Characterization Reports:

Waste Characterization Study: Missouri's most recent waste characterization study was completed in 2016/2017 (see link below). There are no legislative mandates or requirements for waste characterization studies, nor does the state have a strategic plan regarding these studies or the frequency in which they are completed. Our draft work plan identifies the need for an updated waste characterization study to help identify the specific waste streams on which the state needs to focus its resources. While the 2016-2017 report provides acceptable data and appears consistent with surrounding states, there are emerging areas that need to be evaluated further. Organics and Food Waste continue to be a significant portion of the waste stream, and would be an ideal target to continue to address. However, there are potentially problematic waste streams that are just now being identified such as solar panels, windmill blades and EV batteries that have reached the end of their service life that will have to be properly managed.

SEA Food Recovery Hierarchy

EIERA staff will seek stakeholder input and focus on some of these specific target waste streams, collecting specific data (i.e. identify point of origin for large amounts of food waste or organic material) that would ultimately help develop local/regional strategies for diversion. This would be consistent with EPA's Food Recovery Hierarchy, supporting Climate Action Goals with the potential reduction of GHGs (climate change) as well as support the U.S. 2030 Food Loss and Waste Reduction Goal, and National Recycling Strategy.

Statewide Waste Composition Study, 2016-2017

4. Available resources for implementing a solid waste management program (e.g., budget and personnel):

The EIERA/Mo. Market Development Program has 1.5 FTE dedicated to market development which supports sustainable materials management and circular economy strategies. The MMDP receives \$800,000 per year for staff, expenses, and to provide financial assistance to help purchase equipment for Missouri businesses who are creating products from recovered materials and/or processing recovered materials into other value-added feedstock. Financial assistance can only be used for the processing of recovered materials into a product or a feedstock and cannot be used for collection or basic recycling related activities.

The EIERA/Mo. Market Development Program has historically provided support for the MDNR WMP, funding the first waste characterization study and assisting with the plan to create the 20 Solid Waste Management Districts. We are taking the lead on this proposal/opportunity to help the state strategically move forward in our solid waste management planning.

Missouri's Scrap Tire Program collects a \$0.50 fee on the retail sale of every new tire to fund activities related to the regulation of scrap tires throughout the state. Originally, the majority of monies collected were used to clean up illegal scrap tire piles across the state. However, the WMP now offers grants to pay for the installation of playgrounds that provide kid-friendly matting produced from the rubber recycled from scrap tires, in addition to paying for inspection and enforcement activities. The average budget made available for scrap tire grants is approximately \$1,000,000 each year. That fee is set to expire January 1, 2025.

MDNR Waste Management Program - RSMo. 260.225.4 created the regional solid waste management districts and created the solid waste management fund to finance the regulatory management and oversight of the solid waste industry in the state. Thirty nine percent of the revenue is dedicated to the WMP to eliminate illegal solid waste disposal, identify and prosecute persons disposing of solid waste illegally, conduct solid waste permitting activities,

administer grants, etc. The WMP's annual operating budget is approximately \$2.1 million, which supports 28 staff that work on solid waste issues. It is important to note that the primary function of these staff is permitting, enforcement, and grant management. Sixty one percent of the revenue generated by the Solid Waste Fund is automatically allocated to the 20 independent waste management districts. The \$10 million in pass through funding from the MDNR is to support the administration of these districts. Please refer to RSMo. 260.335 for a complete breakdown of the solid waste fund distribution.

The WMP does not have a planning unit at this time and limited resources (staffing/budget) prevent implementation of any new solid waste management programs.

<u>Grants Received - Neither the EIERA</u>, nor the MMDP have received any federal grants for waste reduction, recycling or solid waste management.

A summary table is included below:

Budget Category	Amount (Estimated or Actual) Total Solid Waste, Including Waste Min. /Recycling	Amount (Estimated or Actual) Dedicated to Only Waste Min. / Recycling	Clarifying Notes
Personnel (e.g., salaries, fringe, administrative /overhead)			
EIERA/Mo. Mkt. Dev. Program	175,000	175,000	
MDNR/Mo. Scrap Tire Program	287,000		
MDNR/Waste Mgmt. Program	2,100,000		
Programmatic (e.g., contracts, grants given, other			
activities)			
EIERA/Mo. Mkt. Dev. Program	625,000	625,000	Mkt Dev Grants
MDNR/Mo. Scrap Tire Program	2,000,000	1,000,000	Playground Tire Grants
MDNR/Waste Mgmt. Program	10,000,000	10,000,000	Pass Through for the admin. of the 20 waste mgmt. districts
Grants Received	-0-	-0-	-0-
MDNR/Mo. Scrap Tire Program			
MDNR/Waste Mgmt. Program			
EIERA/Mo. Mkt. Dev. Program			
Total	\$15,187,000	\$11,800,000	

5. Additional programmatic factors such as the level of environmental justice incorporated into a program, extent of focus on source reduction efforts, climate considerations, or the existence of other grant programs:

Environmental justice and climate change goals and requirements were not addressed in the 2005 Solid Waste Management Plan. Without a planning unit and adequate resources, source reduction policies have not been identified as a priority by the state.

Recycling is addressed through the efforts of MMDP's financial assistance program and supported by the twenty solid waste management districts. The vast majority of the \$800,000 received per year by the MMDP goes to Missouri businesses who are diverting materials from landfills by creating products from recovered materials and/or processing recovered materials into other value-added feedstock. The majority of these funding recipients are currently in rural, underserved areas of the state.

B. Scope of Work (Activities, Timeline, and Milestones)

Missouri will perform the following activities:

- 1. The 2005 Missouri Solid Waste Management Plan would be updated and condensed to provide a more concise document that identifies priorities and implementation strategies. Two additional plans would be incorporated into the existing plan:
- 2. a statewide market development plan; and
- 3. a sustainable organic materials management plan.

These three plans would help Missouri's 20 Solid Waste Management Districts identify priority items and implementation strategies that could be used for more effective community planning statewide.

These planning activities fall under Category #1 of the Eligible Activities/Use of Funding – Develop or update plans to advance post-consumer materials management.

Stakeholders:

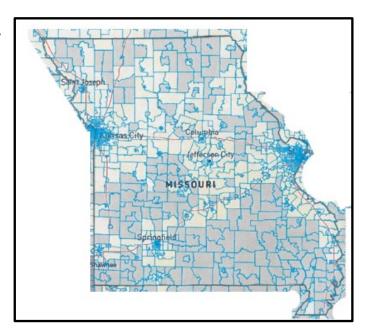
Stakeholders include: Environmental Improvement and Energy Resources Authority Staff/ Missouri Waste Management Program Staff; the Scrap Tire Advisory Group, and the 25 members of Missouri Solid Waste Advisory Board (RSMo 260.345). The board is comprised of the 20 solid waste management district, solid waste management industry, solid waste composting and recycling industries, and the general public.

Per RSMo 260.345 - The advisory board shall be composed of the chairman of the executive board of each of the solid waste management districts or his or her designee, and other members as provided in this section. Up to five additional members shall be appointed by the program director of the solid waste management program of which two members shall represent the solid waste management industry and have an economic interest in or activity with any solid waste facility or operation, one member may represent the solid waste composting or recycling industry businesses, and the remaining members shall be public members who have demonstrated interest in solid waste management issues and shall have no economic interest in or activity with any solid waste facility or operation but may own stock in a publicly traded corporation which may be involved in waste management as long as such holdings are not substantial.

Number of counties served by the plans: 114 Missouri Counties are represented and all communities, cities, towns, villages within those counties totaling 6.2 million Missouri citizens.

Number of disadvantaged communities (as defined in this Guidance) served by this workplan. The State of Missouri has a significant portion of "disadvantaged communities" as identified in EPA's Environmental Justice Screening and Mapping Tool. Climate & Economic Justice Screening Tool (geoplatform.gov)

<u>Jobs Created</u>: 0 jobs will be created with the update of the plan but the long term impact and outcomes from the research and planning has the potential to provide economic benefit.



The table below provides a list of activities with an estimated timeline for work and completion on specific tasks.

Timeline	Activity/Milestones				
Month 1 – Oct. 2023	Establish Stakeholder Group, Solicit input/Feedback on RFP, Begin Review of Existing Plan				
Month 3 – 6	Development and Issuance of RFP for a				
	1. State Solid Waste Management Plan;				
	2. Statewide Market Development Plan; and				
	3. Sustainable Organic Materials Management Plan				
Month 6-24	Continue collaboration with stakeholder group(s).				
	Oversee the contracts and consultants work to ensure the deliverables are acceptable.				
	Provide feedback regarding priorities and implementation strategies.				
Month 32	Provide draft Updated Solid Waste Management Plan for review.				
Month 35-36	Debut and distribute the updated Solid Waste Management Plan, Market Development Plan,				
	and Sustainable Organic Materials Management Plan to stakeholders, industry, solid waste				
	management districts via state website, SWAB mtgs., MWCC & MORA Conferences, etc.				
Month 1 –36	Oversee project, communicate with stakeholders and EPA Region 7 Contacts				
	Submit semi-annual reports to EPA.				

Activities Narrative Table

Activities Narrative	Timeframe for Accomplishm ent (FFY Quarter)	Results of Activities (Outputs)	Projected Environmental or Programmatic Improvement (Outcomes)
Task 1: Cooperative Agreeme Activity 1: Program Management and S		rsight	
Supervise and manage the SWIFR grant to meet program goals. Conduct periodic project status meetings with staff to discuss project issues and priorities.	Ongoing annual activities	Performance Management Program (PMP) Evaluations	Maintain effective work force to meet work plan commitments
Submit semi-annual reports and fulfil other reporting requirements in a timely and accurate manner	Semi-annually	Semi-annual reports	Improved implementation of SWIFR program, increased organization of information to better assist review
Activity 2: Cooperative Agreement Adm	 ninistration		
Ensure that CA work plan is developed in accordance with State and EPA policies. Ensure that budget and administrative aspects of application requests conform to State and EPA policies. Review new and revised CA agreement guidance and serve as a resource for staff.	Annually	CA work plans, budgets, and federal assistance forms	Effective CA applications, expedited processing, improved awareness of EPA guidance
Maintain current Quality Management Plan	Annually	Signed Quality Management Plan	Grant compliance

Activities Narrative	Timeframe for Accomplishm ent (FFY Quarter)	Results of Activities (Outputs)	Projected Environmental or Programmatic Improvement (Outcomes)			
Administer project closeout activities.	Within 120 days of grant expiration	Final semi-annual performance report, financial status report	Project closeout			
Activity 3: Cooperative Agreement Legal	Assistance					
Review and provide interpretation of State laws and regulations to ensure effective implementation of the SWIFR program.	As necessary	Legal review	Improved implementation of the SWIFR program			
Activity 4: Fiscal and Contract Managen	Activity 4: Fiscal and Contract Management					
Track the status of deliverables for contracted projects	As projects progress through program	Semi-annual Report	Efficient contracting activity, ensure work plan commitments are met			
Task 2: Program Enhancemen Activity 1: Enhance Program	t					
Participate in meetings, conference calls, and other events with EPA and other states to exchange information regarding best practices, program updates, and the like.	As necessary	Identification of best practices	Established Networks for information exchanges			
Evaluate perceived roadblocks to utilizing the SWIFR Program, reevaluate existing program and incorporate steps to streamline the program and increase its use. Institutionalize changes. Engage in dialogue with EPA regarding program changes.	Fiscal years 2024 - 2026	Updates to program	Increase use of the program			

Activities Narrative	Timeframe for Accomplishm ent (FFY Quarter)	Results of Activities (Outputs)	Projected Environmental or Programmatic Improvement (Outcomes)
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Task 3: Program Activities

Activity 1: Develop or update plans to advance post-consumer materials management. Update the Missouri Solid Waste Management Plan

Activities Narrative	Timeframe for Accomplishm ent (FFY Quarter)	Results of Activities (Outputs)	Projected Environmental or Programmatic Improvement (Outcomes)
-Include various resources including EPA's guidance for resiliency and natural disaster debris planning.		MWCC & MORA Conferences, etc. Reports to EPA and other stakeholder groups Update (1) State Solid Waste Management Plan	-Support local and regional efforts to address climate goals and circular economy goals and action plans. Direct Job Creation – 0 *The plan should provide priorities and strategies that would support business and job creation.

Activity 2: Develop or update plans to advance post-consumer materials management. Develop a Statewide Market Development Plan

Develop a STATEWIDE MARKET DEVELOPMENT PLAN as an integral component of an updated over-arching state solid waste management plan. Information and recommendations from the market development plan will support priorities and strategies in the solid waste management plan.	October 1, 2023- April, 2024 (18 months)	Establish & Engage Stakeholder Group (approx.100 members from the following groups: SWAB, SWMD Planners, COAM, MORA, Recycling Industry, Waste Industry, etc.)	Inclusion of a statewide market development plan into the updated Solid Waste Management Plan Improved awareness of plan, opportunities and strategies to increase demand for recovered materials
-Draft RFP for the development of a STATEWIDE MARKET DEVELOPMENT PLAN Key Components should include opportunities/strategies for the following: -Strategy for Procurement/Training		Develop & Issue RFP for Statewide Market Dev. Plan Creation of an STATEWIDE MARKET DEVELOPMENT PLAN for inclusion in the UPDATED Solid Waste Management Plan Creation of a plan to stimulate the use of recovered material	Development of efficient strategies for stakeholders to implement The creation of a Statewide Market Development Plan will: -Allow decision makers to make educated decisions regarding waste mgmt. programs and resources needed to implement strategies -Provide recommendations and strategies to all 114 Missouri counties, including rural,

Activities Narrative	Timeframe for Accomplishm ent (FFY Quarter)	Results of Activities (Outputs)	Projected Environmental or Programmatic Improvement (Outcomes)
		feedstocks in processing and manufacturing	underserved, EJ areas of the state using the current SWMD infrastructure
		Education and promotion of the updated plan and its various components. Reports to EPA and other stakeholder groups Creation of a Statewide Market Development Plan for inclusion in the State Solid Waste Management Plan.	Implementation of strategies will result in: -Increased Landfill Diversion -Support for the National Recycling Goal -Support the National Food Loss and Waste Reduction Goal -Support local and regional efforts to address climate goals and circular economy goals and action plans. Direct Job Creation – 0 *The plan should provide priorities and strategies that would support business and job creation.

Activity 3: Develop or update plans to advance post-consumer materials management. Develop a Sustainable Organic Materials Management Plan

Commission a study/development of a SUSTAINABLE ORGANIC MATERIALS MANAGEMENT PLAN as an integral component of an updated over-arching state solid waste	October 1, 2023- April, 2024 (18 months)	Establish & Engage Stakeholder Group to develop & issue an RFP for the development of a Sustainable	Inclusion of the Sustainable Organic Materials Management Plan into the updated Solid Waste Management Plan
management plan. Information and recommendations from the organic materials management plan will support priorities and strategies in the solid waste management plan.		Organic Materials Management Plan (approx. 45 members from the following groups: SWAB, SWMD Planners, COAM, MORA, Recycling Industry,	The creation of a Sustainable Organic Materials Management Plan will: -Allow decision makers to make educated decisions regarding waste mgmt. programs and resources needed to implement strategies -Provide recommendations and strategies to all 114 Missouri counties, including rural,

Activities Narrative	Timeframe for Accomplishm ent (FFY Quarter)	Results of Activities (Outputs)	Projected Environmental or Programmatic Improvement (Outcomes)
-Draft RFP for a study/development of a SUSTAINABLE ORGANIC MATERIALS MANAGEMENT PLAN Key Components should include opportunities/strategies for the following: Usable Food Recovery for Food Insecure Recovery of Organic Materials for Animal Feed Biochar for Agricultural Applications		Composting Industry, Waste Industry, etc.) Creation of an SUSTAINABLE ORGANIC MATERIALS MANAGEMENT PLAN for inclusion in the UPDATED Solid Waste Management Plan Creation of an organic materials management plan that includes strategies to -Stimulate the recovery of organic materials to be diverted for best use -Prevent and divert wasted food and other organic materials Education and promotion of the updated plan and its various components. Reports to EPA and other stakeholder groups Creation of a Statewide Organics Management Plan for inclusion in the State Solid Waste Management Plan.	underserved, EJ areas of the state using the current SWMD infrastructure -Improve awareness of plan, opportunities and strategies for organic materials recovery including: Implementation of strategies will result in: -Rescue and donation of "usable" food to food-insecure/EJ areas of the State -Recovery of food waste/organic materials for animal feed -Recovery of organic material for biochar and other agricultural usesIncreased Landfill Diversion -Support for the National Recycling Goal -Support the National Food Loss and Waste Reduction Goal -Support local and regional efforts to address climate goals and circular economy goals and action plans. Direct Job Creation — 0 *The plan should provide priorities and strategies that would support business and job creation.

C. ROLES AND RESPONSIBILITIES:

EIERA Staff will be taking the lead and ensuring the activities listed in the scope of work are completed.

EIERA Staff will serve as the "lead" or key contact with all stakeholders and will solicit feedback re: RFP language, recommendations to the plan, priorities and implementation strategies, etc.

Stakeholders (MWMP, SWAB/SWMDs) – Provide input and feedback on activities including RFP language, priorities, goals, draft documents, etc.

Contractors will complete the work agreed to in their proposal/contact and perform the work as set forth in the agreement. Contractors will work the EIERA staff as the lead on this statewide project. Contractors will be asked to present on their findings to the various stakeholder groups.

Section 2: Programmatic Priorities and Strategic Plan Goals

The activities described in this workplan support the grant Programmatic Priorities and EPA's FY 2022-2026 Strategic Plan:

- A. Goal 1: Tackle Climate Change,
 - Objective 1.1: Reduce Emissions that Cause Climate Change EPA 50% Recycling Goal by 2030 EPA's 2020 National Recycling Goal US 2030 Food Loss and Waste Reduction Goal United States 2030 Food Loss and Waste Reduction Goal | US EPA
- B. Goal 6: Safeguard and Revitalize Communities,
 - Objective 6.2: Reduce Waste and Prevent Environmental Contamination

<u>Section 3. Environmental Results—Outputs and Outcomes</u>

Waste is an issue affecting all Missourians and new strategies are needed to strengthen traditional programs and address current needs, opportunities and challenges. The State of Missouri will update the Solid Waste Management Plan and incorporate both a Statewide Market Development Plan and a Sustainable Organic Materials Management Plan into this guiding document. Information and recommendations from these plans will support priorities and strategies and will help communities develop policies and allocate resources for solid waste management across the state in coming years.

Purpose Statement - The purpose of the Missouri Solid Waste Management Plan is to contribute to the health, well being and quality of life for all Missourians by guiding the development of solid waste management systems which are environmentally and economically sustainable, efficient and effective.

Outputs and Outcomes are listed in the Activity Table (pages 7-11).