



Resource Recovery & Recycling Authority of Southwest Oakland County

20000 W. 8 Mile Rd
Southfield, MI 48075-5708
Office: 248.208.2270
www.RRRASOC.org

THE RECYCLING AUTHORITY
Since 1989

**Agenda
October 26, 2023
RRRASOC Board of Directors
Regular Meeting
9:30 am**

**Wixom Department of Public Works
2041 Charms Road
Wixom, MI 48393**

1. Call to Order
2. Roll Call
3. Approval of Agenda
4. Audience Participation
5. Matters for Discussion/Action

A. Battery Policy Statement

B. Simple Recycling Contract Extension

C. Disaster Debris Management Planning Project Update

D. Food Waste and Organics Composting Discussion

6. Manager's Report
7. Other
8. Consent Agenda
 - A. Payment of Bills Report
 - B. Investment Report
 - C. Revenue and Expenditure Report
 - D. Diversion Rate Report
 - E. MRF Operations Report
 - F. Minutes of September 28, 2023 Regular Meeting
9. Adjournment

Note that the meeting will be followed by a tour of the Spurt composting facility.

RRRASOC Member Communities

Farmington ♦ Farmington Hills ♦ Milford ♦ Milford Township
Novi ♦ South Lyon ♦ Southfield ♦ Walled Lake ♦ Wixom



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To: RRRASOC Board of Directors
From: Michael Csapo, General Manager, RRRASOC
Date: October 16, 2023

Re: **Battery Policy Statement**

Action Requested

Review and approve the attached Policy Statement.

Background

As you are aware, lithium-ion batteries are increasingly ubiquitous and their frequent presence in the waste stream poses fire risks for waste and recycling facilities. RRRASOC is not alone in experiencing MRF fires due to lithium-ion batteries.

The attached policy statement has been developed to call attention to the problem and potential policy solutions that can help mitigate the risk. This statement is part of a multi-stakeholder effort to encourage legislators, policymakers, and the battery industry to craft and deploy a statewide framework that can reduce the threat batteries pose to the health, safety, and welfare of consumers and workers in the waste and recycling industry.

As indicated in the document, the approach called for by this stakeholder group is not unique to Michigan and has been implemented in ten states, the District of Columbia, and many other countries across the globe.

While the details may vary, the common element of the various frameworks is to shift the burden for mitigating the risk from local governments and private waste/recycling companies to the manufacturers, retailers, and consumers of the batteries.

Recommendation

Approve the attached Policy Statement.

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Policy Statement

Batteries have become an important and nearly unavoidable aspect of our modern economy. Businesses, institutions, and homeowners rely on a myriad of products, tools, and devices that are powered by an ever-growing variety of batteries. Indeed, batteries have become an integral component of many items that have made our lives more productive and convenient.

However, for all the benefits of batteries, they also represent a significant risk when improperly used, stored, or managed at the end of their useful life. In particular, when mismanaged, certain batteries present a dangerous fire hazard that poses a threat to the health, safety, and welfare of residents and workers. The improper storage, transportation, and/or disposal of batteries constitutes a substantial fire threat to homes, businesses, and vehicles. In fact, such fires have become increasingly common in homes and businesses.

While there is some education and programming around the proper use, storage, and disposal/recycling of batteries, the incidence of battery-related fires continues to grow. The need for more robust education, training, and management solutions is evident.

The problem is particularly acute in the waste and recycling industry. When batteries are improperly included with material to be disposed or recycled, those batteries create a fire risk for the containers in which they are placed, the vehicles that collect the material, and the facilities to which the material is delivered. Fires caused by batteries being improperly discarded jeopardize the investment and livelihood of both public and private operations. But more importantly, such fires endanger the health, safety, and welfare of employees, people who live or work nearby, and the first responders upon whom we rely.

The undersigned stakeholders believe that there should be improved policies and funding, and legislation if necessary, concerning the following areas:

- Increased consumer and employee education regarding the proper use, storage, and end-of-life management of batteries;
- Increased programming for the proper end-of-life collection and disposal/recycling of batteries;
- Enhanced detection and capture technology, as well as employee training, to ensure that batteries that are improperly discarded with waste and recycling materials are identified and properly managed when received at waste and recycling facilities;
- More robust deployment of on-site response equipment and training to ensure a safe, swift, and effective response to fires caused by batteries.

This call for improved policies, funding, and legislation is not new or unique to Michigan. In the U.S., ten states and the District of Columbia have enacted product stewardship or extended

producer responsibility (EPR) laws for batteries. Globally, similar laws and policies for batteries are found in countries such as Australia, Japan, India, and Canada, as well as the European Union. Moreover, a product stewardship or EPR framework is not new to Michigan. Our state has already adopted such an approach for items such as consumer electronics, lead acid batteries, scrap tires, and used beverage containers, among others.

It is the view of the undersigned that in order to protect the health, safety, and welfare of Michigan residents and workers, to protect Michigan's environment, and to reduce the risk to private and public sector investment in equipment, facilities, and operations, a product stewardship or EPR framework for batteries should be established in Michigan.

Background

Problem Description

Batteries, particularly lithium-ion, have been shown to be a growing fire hazard. According to the National Fire Protection Association, “Lithium-ion batteries are increasingly found in devices and systems that the public and first responders use or interact with daily. While these batteries provide an effective and efficient source of power, the likelihood of them overheating, catching on fire, and even leading to explosions increases when they are damaged or improperly used, charged, or stored.”¹

In February 2018, the U.S. Consumer Product Safety Commission’s Status Report on High Energy Density Batteries Project reported over 25,000 overheating or fire incidents involving more than 400 types of lithium battery-powered consumer products that occurred over a five-year period.²

According to a 2021 EPA report, “LIB (lithium-ion batteries) fires are happening across the full spectrum of the waste management process.”³

Included in the EPA report is the following explanation of how lithium-ion batteries present a fire risk:

“LIBs have high energy density, meaning they store a large amount of energy relative to their size and weight. However, this high energy density and the materials needed to achieve it make LIBs prone to combustion or explosion when they are damaged. A damaged or defective LIB may experience thermal runaway, a reaction in which the battery unexpectedly releases its energy and begins self-heating in a runaway reaction. This reaction can quickly produce enough heat to ignite materials near the battery, even if the battery itself does not ignite. Though other types of batteries can experience thermal runaway, LIBs are particularly prone to combustion because they store such large amounts of energy. An LIB’s electrolyte is also combustible, providing fuel to the fire...”

One of the most common causes of thermal runaway in LIBs is physical damage to the battery. When a battery casing is punctured, crushed, or otherwise mechanically damaged, the separator may be pierced. If the separator is breached, a short circuit can develop as the anode and cathode come into contact, allowing the LIB’s stored energy to be rapidly released. This short circuit creates heat buildup, which can then trigger thermal runaway in other cells.”⁴

A 2021 analysis and assessment of battery-caused waste fires reached the following conclusions:

- The assessment reveals that the risk of lithium-based portable batteries is significantly too high, which makes it difficult to maintain modern waste management in a sustainable way;

- The increased number of major fires in waste management in recent years is clear and undeniable evidence;
- No other substance or material has ever comparably endangered the whole waste industry;
- The waste sector has to aim to collect as many batteries as possible in the separate collection systems and take-back schemes, as only this collection system guarantees a damage-free return system. That requires increased effort in public relations and consumer awareness-raising. However, a 100% separate collection rate for portable batteries is highly unrealistic without a comprehensive deposit system;
- Hence, operators of treatment facilities have to find ways to (1) protect critical infrastructure and treatment processes (e.g., including new detection and extinguishing methods) or (2) preferably detecting and separating portable batteries in the course of their treatment processes.⁵

Michigan Experiences

Recycling and waste operations throughout Michigan have experienced fires due to lithium-ion batteries being improperly included with waste or recycling materials. Often, these batteries are disposed with other flammable material, such as paper and plastic, and serve as a source of ignition. Below are just a few examples.

“Kent County operates residential material recovery facilities, electronics recycling collections, waste to energy, landfill, and transfer stations. On a daily basis, we identify and remove lithium-ion batteries or items containing lithium-ion batteries from our material stream. However, due to the significant increase of these batteries we are often unable to find them until they create a fire. In the last five years, we’ve had multiple facility and transfer trailer fires at all of our operations due to lithium-ion batteries. While we’ve been fortunate that those fires did not result in any injuries, we have experienced equipment damage, destroyed product, lost production time, water damage, extensive cleanup costs and required the assistance of the local fire department. Our losses have exceeded \$100,000.” – Darwin J. Baas, MPA, Director, Kent County Department of Public Works

“Emmet County Recycling is a public entity acting as a super drop off center in a rural area of northern Michigan. As a waste transfer station, MRF and hazardous materials collection program, we are assuming an overabundance of risk and liability when it comes to batteries in our facility and infrastructure. In a short period of time, several battery fires have broken out in our waste compactors, recycling balers and recycling tip floor. We have also seen an increase in waste haulers using our facility as a burning load drop space from batteries sparking fires in their loads.

Our program has taken a focused approach in community collection of batteries in recent months due to the high standards of our battery vendor. As the super drop off, we bear the brunt of the liability and risk by collecting these batteries while trying to lead the charge educating about proper disposal. We fear losing our end market due to

the complexity of safe shipping requirements. As a public organization, we do not have the capacity to meet their sorting and taping expectations. The current model is not sustainable and requires education and technology from the manufacturers to solve these safety issues on a larger scale before serious injury or damage occurs.” - Andi (Shepherd) Tolzdorf, Director, Emmet County Recycling

“Despite having education and collection programming for the proper recycling and disposal of batteries, every day, we identify and remove lithium-ion batteries or items containing lithium-ion batteries from the material stream at our MRF. Unfortunately, due to the steady increase of such batteries in our feedstock, sometimes we don’t find them until they become compromised and start a fire.

In the last five years, we’ve had four significant fire incidents due to lithium-ion batteries. We’ve been fortunate that those fires did not result in any injuries, but we have experienced significant equipment damage, destroyed product, lost production time, and required the assistance of local first responders.” - Michael Csapo, General Manager, Resource Recovery and Recycling Authority of Southwest Oakland County

“Recycle Ann Arbor is a small non-profit in Southeast Michigan and operates a state-of-the-art zero waste MRF that serves as a regional recycling hub. In the 2 years our MRF has been in operation, we’ve had several lithium-ion battery fires break out. They continuously threaten the future of our mission and our ability to serve our community’s single stream recycling needs. Lithium-ion batteries can enter an uncontrollable, self-heating state that can result in the release of gas, cause fire, and possible explosion, and therefore pose a major safety concern to our employees. Once a fire breaks out, it can’t be extinguished with traditional fire extinguishers, and water may not prevent a lithium-ion battery from burning & spreading. Due to this grave risk, that could permanently put us out of business, we’ve invested our own capital funds (being a non-profit this is challenging) to purchase expensive fire prevention services.

Additionally, reignition of lithium-ion batteries is common. Even after being extinguished, a lithium-ion battery can continue to generate heat (even with no visible sign of fire), when that heat reaches a certain level, fire may unexpectedly reignite and quickly spread. These batteries are known to reignite (without warning) minutes, hours, & even days after all visible fire has been put out. This not only impedes the safety of our employees/first responders, but it also requires overtime wages to be paid to staff to provide round-the-clock observation after a fire occurs, which is also a burden to our bottom line. If a fire were to fully ignite and spread, the damage would be significant and hard to recover from financially. Excessive heat from these fires is very destructive to our building’s infrastructure and equipment, not to mention if the fire department has to put the fire out, they could use up to a million gallons of water ultimately destroying all electronics required to operate our MRF. We will never be able to recoup those losses to rebuild our facility, therefore putting us out of business.

This is why we've made the significant investments in detecting and stopping any fires before they spread, and continue to advocate for any policy level solutions that raise awareness and invest in the infrastructure needed to keep batteries out of the recycling". – **Megan Lunsford, Marketing and Communications Manager, Recycle Ann Arbor**

"SOCRRA has had regular fires at our facilities that we believe are caused by lithium ion batteries. We have had fires at both our recycling facility (MRF) and at our transfer station. Fortunately, SOCRRA staff and our fire protection systems were able to extinguish those fires before major damage occurred. However, SOCRRA has had to invest in multiple layers of fire detection and fire suppression systems in order to protect our facilities. One of the difficulties caused by lithium battery fires is that they have occurred at four different locations within our facilities. This makes it imperative for SOCRRA to maintain several different fire detection and fire suppression facilities. In addition, we will probably be required to invest in additional fire detection and suppression systems in order to adequately protect our facilities from the hazards posed by lithium batteries." – **Jeff McKeen, General Manager, Southeast Oakland County Resource Recovery Authority**

What are product stewardship and extended producer responsibility?

Product stewardship is the act of minimizing the health, safety, environmental, and social impacts of a product and its packaging throughout all lifecycle stages, while also maximizing economic benefits. The manufacturer, or producer, of the product has the greatest ability to minimize adverse impacts, but other stakeholders, such as suppliers, retailers, and consumers, also play a role. Stewardship can be either voluntary or required by law.

Extended producer responsibility (EPR) is a mandatory type of product stewardship required by law. It includes, at a minimum, the requirement that the manufacturer's responsibility for its product extends to post-consumer management of that product and its packaging. There are two related features of EPR policy: (1) shifting financial and management responsibility, with government oversight, upstream to the manufacturer and away from the public sector; and (2) providing incentives to manufacturers to incorporate environmental considerations into the design of their products and packaging. EPR levels the playing field among competitors and incentivizes environmentally conscious design.

In the U.S., there are 131 EPR laws active in 33 states across 16 product categories. Those product categories include hazardous materials (such as, but not limited to, batteries, mercury switches, pesticides, and gas cylinders) and readily recyclable material (such as printed paper and packaging materials).

References

1. National Fire Protection Association. <https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Lithium-Ion-Battery-Safety> Accessed September 26, 2023
2. *Status Report on High Energy Densities Battery Project*. U.S. Consumer Product Safety Commission. February 12, 2018. Page 4. https://www.cpsc.gov/s3fs-public/High_Energy_Density_Batteries_Status_Report_2_12_18.pdf?UksG80UJqGY0q4pfVBkbCuUQ5sNHqtwO
3. *An Analysis of Lithium-ion Battery Fires in Waste Management and Recycling*, U.S. EPA. July 2021. Page 1. https://www.epa.gov/system/files/documents/2021-08/lithium-ion-battery-report-update-7.01_508.pdf
4. *An Analysis of Lithium-ion Battery Fires in Waste Management and Recycling*, U.S. EPA. July 2021. Page 5. July https://www.epa.gov/system/files/documents/2021-08/lithium-ion-battery-report-update-7.01_508.pdf
5. Nigl, Thomas, Mirjam Baldauf, Michael Hohenberger, and Roland Pomberger. 2021. "Lithium-Ion Batteries as Ignition Sources in Waste Treatment Processes—A Semi-Quantitate Risk Analysis and Assessment of Battery-Caused Waste Fires" *Processes* 9, no. 1: 49): <https://doi.org/10.3390/pr9010049>



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To: RRRASOC Board of Directors
From: Michael Csapo, General Manager, RRRASOC
Date: October 18, 2023

Re: **Simple Recycling Contract Extension**

Action Requested

Review and approve the extension of the Simple Recycling contract.

Background

The existing agreement with Simple Recycling for the at home collection of used clothing and household goods expires on December 31, 2023. The proposed extension continues the program through December 31, 2026.

The program continues to serve as a complement to the other programs in the RRRASOC communities, at no cost to RRRASOC, the communities, or residents.

Recommendation

Approve the extension of the Simple Recycling contract.

RRRASOC Member Communities

Farmington ♦ Farmington Hills ♦ Milford ♦ Milford Township
Novi ♦ South Lyon ♦ Southfield ♦ Walled Lake ♦ Wixom

AGREEMENT RENEWAL AMENDMENT
FOR COLLECTION OF SOFT RECYCLABLES

This Agreement for the Collection of Soft Recyclables ("Agreement") is made and entered into this _____ day of _____, 2023, by and between Resource Recovery and Recycling Authority of Southwest Oakland County (RRRASOC), a public corporation organized and existing under Act 179, and having a principal place of business at 20000 West 8 Mile Rd, Southfield, MI 48075 and Great Lakes Recycling, Inc., dba Simple Recycling, an Ohio corporation (herein referred to as "Contractor") with a business address at 5425 Naiman Parkway, Solon, OH 44139.

WHEREAS the Parties entered into an AGREEMENT FOR A FOR COLLECTION OF SOFT RECYCLABLES program on December 9, 2013 (the "Original Contract") and;

WHEREAS the Parties hereby agreed to extend the term of the Original Contract in accordance with the terms of the Original Contract as well as the terms provided for an additional period to end on December 31, 2026 and;

In consideration of the mutual covenants contained herein, both RRRASOC and Contractor mutually covenant and agree to additional amendments as follows:

- Amendments to the terms of this agreement are included in Exhibit A.

This Extension binds and benefits both Parties and any successors or assigns. This document, including the attached Original Contract, is the entire agreement between the Parties.

All other terms and conditions of the Original Contract remain unchanged.

This Agreement shall be signed on behalf of the Resource Recovery and Recycling Authority of Southwest Oakland County (RRRASOC) by Michael Csapo, its General Manager, and on behalf of Great Lakes Recycling Inc dba Simple Recycling, by Adam Winfield, its President.

Resource Recovery and Recycling Authority of Southwest Oakland County (RRRASOC)

By: _____ Date: _____ Michael Csapo, General Manager

Great Lakes Recycling dba Simple Recycling , LLC

By: _____ Date: _____ Adam Winfield, President

Exhibit A

1. **Set Out Procedures.** Residents shall be offered free scheduled pickup service on www.SimpleRecycling.com, or by phone with Simple Recycling. Residents shall be instructed to place Soft Recyclables into Containers and placed Containers outside front door for collection and labeled for Simple Recycling. Overflow material shall be placed adjacent to the Container(s) in plastic bags or other easily handled container. Soft Recyclables shall not be set out in tied bundles. Contractor must collect all Soft Recyclables that are set out in this manner.

2. **Collection Schedule.** Collections shall be made from Service Recipients on a schedule set by the contractor.

3. **Inventory of Containers.** Containers shall be provided by the resident. Acceptable containers include plastic, paper bags and boxes.

4. **Contractor's Fee.** Contractor shall pay to RRRASOC a contract fee of five cents (\$0.05) per pickup of Soft Recyclables scheduled and collected via SimpleRecycling.com in the RRRASOC's portion of the residential Service Area. Payments and estimated collection weight reports shall be made to RRRASOC not more than thirty (30) days following the close of each calendar quarter during the term of this Agreement. Estimated weight shall be collected and documented upon completion of each collection day. Under no circumstance will RRRASOC, its residents or Service Recipients incur any fees, charges or assessments to the Contractor for Contractor's delivery of services under this Agreement.

5. **Public Information and Education Program.** RRRASOC agrees to notify residents of program through existing communications channels a minimum of 6 times in each calendar year at no cost to contractor. RRRASOC agrees to work with Contractor to update RRRASOC and municipal websites with new program information.

Examples of communication channels include: Social media, email, newsletters, publications, school events etc.



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To: RRRASOC Board of Directors
From: Michael Csapo, General Manager, RRRASOC
Date: October 17, 2023

Re: **Disaster Debris Management Planning Project Update**

Action Requested

No action is requested at this time.

Background

Attached is the work plan provided by Tetra Tech during the project planning meeting between RRRASOC, SOCRRA, and Tetra Tech. As shown, the tentative schedule is to complete the plan review by next April and conduct training as necessary in May. The schedule will be revised as needed.

A project kick-off meeting with all of the municipal contacts is being planned for November 16. We expect to issue an invitation within the next week or so.

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RRRASOC and SOCRRA Disaster Debris Management Project Work Plan October 17, 2023

SCOPE OF SERVICES

TASK 1: PROJECT INITIATION & MANAGEMENT RESPONSIBILITY

Project Planning Meeting. Tetra Tech will initiate the project by conducting a project planning meeting with the Project Management Team. During this meeting, Tetra Tech and the Project Management Team will establish the overarching planning objectives that will define the disaster debris management planning process, determine project milestones, and introduce the Tetra Tech project team members.

Together, the Tetra Tech project manager and the Project Management Team will accomplish the following:

- Confirm the project schedule, deliverables, and planning assumptions.
- Identify key stakeholders from municipalities to participate in the project.
- Identify critical path activities, decision points, and key inputs required.
- Discuss data needed for plan development. This can include jurisdiction emergency plans, equipment lists, organization charts, health and safety plans, priority street and facility lists, as well as other information deemed necessary for the planning effort.
- Establish project communication and coordination protocols between Tetra Tech, and participating jurisdictions.

Tetra Tech will provide a meeting agenda to help guide discussion and will prepare meeting minutes to capture the key decisions and outcomes of the project planning meeting.

Work Plan. Within one week of the project scoping meeting, the Tetra Tech project manager will provide the Project Management Team with a detailed work plan, which will identify the core goals, objectives, and scope of the disaster debris management plan (DDMP) project. Once approved, the work plan will guide the development, execution, and follow-up phases of the project.

Progress Reports. During the project, project reports will be provided to the Project Sponsor about every two weeks which identifies the accomplishments during the two-week reporting period, the objectives for the next reporting period, as well as an overall status of deliverables and timelines.

Project Kickoff Meeting. Following the project scoping meeting, Tetra Tech will begin the project by facilitating a DDMP project kickoff meeting with the broader planning team from SOCRRA and RRRASOC and participating jurisdictions. The kickoff meeting will last approximately two hours and will be conducted online in keeping with social distancing protocols. The kickoff meeting will provide an overview of disaster debris management operations, highlight the disaster debris management planning process, address the need for various staff involvement from each jurisdiction in the overall project, and outline the phases and timeline of the DDMP planning project. Tetra Tech will develop a PowerPoint presentation, an agenda, and sign-in sheets for the meeting. Meeting minutes will be prepared after the kickoff meeting to capture the key points of discussion.

Tetra Tech will work with the Project Sponsor and the participating jurisdictions to develop the DDMP and jurisdictional annexes to comply with the National Incident Management System (NIMS), Incident Command System (ICS), Federal Emergency Management Agency (FEMA) Publication Assistance Program and Policy Guide (PAPPG), Federal Highway Administration (FHWA) Emergency Relief Fund guidelines, and U.S. Environmental Protection Agency best practices for debris management. (Please note: Since elimination of the debris plan increased match incentive, FEMA no longer reviews DDMPs, but the local DDMP addendum will be developed to meet the requirements FEMA had outlined as part of the Alternate Procedures Pilot Program for Debris Removal).

TASK 2: DATA GATHERING

Data Gathering. Tetra Tech will develop the DDMP and jurisdiction specific appendices by researching, reviewing, and incorporating participating jurisdictions' documents relating to debris removal operations. In addition, Tetra Tech will conduct online planning meetings with representatives from participating jurisdictions as well as SOCRRA and RRRASOC to gather information for plan development. Information to be discussed will be departmental roles and responsibilities, resources such as equipment and vendors that can be brought to bear in response to a debris generating disaster, potential locations for temporary debris management sites, priority streets, debris zones, existing relevant plans and procedures maintained by the jurisdiction, and other information specific to the needs of the jurisdiction.

TASK 3: DRAFT DDMP DEVELOPMENT

Following the jurisdictional planning meetings Tetra Tech will develop the draft DDMP and jurisdiction specific appendices to include the following components:

- Organizational structure and responsibilities for participating jurisdictions as well as other stakeholders (regional, state, federal, and private partners) involved in debris removal, handling, transportation, processing, and disposal operations.
- Clearly defined, Incident Command System (ICS)-based management structure and reporting process strategies and processes that support effective decision making and prioritization
- Identification of the participating jurisdiction's role in managing debris clearance and removal operations for their jurisdictions as well as the role of the County in providing support for jurisdictions in the operational area.
- Temporary Debris Management Site (TDMS) selection criteria and planning
- Debris management collection and handling strategies based on debris types and mixes (vegetative debris; hazardous stumps, leaners, and hangers; construction and demolition debris; hazardous waste; and white goods)
- Pre-event preparations prior to an impending debris-generating incident
- Post-event response
- Sample public information content and press releases
- Debris reduction options
- Final disposal of debris including methods for maximizing material diversion through reuse and recycling
- Use of contracted services for debris operations including processes for pre-qualifying contactors
- Private property debris removal and demolition processes
- Health and safety considerations
- Environmental and other regulations

Debris Forecasting. To provide estimates of the potential types and quantities of debris that jurisdictions might encounter in response to a debris generating disaster, Tetra Tech will collect County and local

hazard mitigation plans, examine historical records of disasters and other data to derive a list of the debris generating disaster most likely to occur in the area and the types of debris and the estimated quantities of debris that could be generated. The types of hazards may include: weather, ice storm, seismic, wildfire, flood and other incidents that are deemed significant and appropriate for inclusion. The types of debris that might be generated from such disasters may include:

- Construction & Demolition Waste
- Vegetative and Woody Debris
- White Goods/Scrap Metal
- Concrete/Asphalt/Rubble
- Electronic Items
- Soil/Mud
- Hazardous Waste (Ignitable, Corrosive, Toxic, Reactive)
- Putrescent Waste (Food, Animal)
- Vehicles/Boats
- Infectious Waste
- Recyclable/Reusable Materials
- Contaminated Wastes
- General Refuse

Mutual Aid. In examining the resources available to respond, an important resource to consider is mutual aid. As some contract resources may take some time to activate and respond to the incident, mutual aid resources located in the immediate area might be able to provide a more timely response until other resources can be brought on board. In developing the plan Tetra Tech will:

- Assess existing mutual aid agreements within a 200-mile radius;
- Identify and outline procedures to request mutual aid;
- Provide a model Mutual Aid Agreement, if necessary;
- Provide contact information at the State and County levels for requesting and coordinating mutual aid assistance.

Debris Removal. In developing the debris management strategy, Tetra Tech will lay out a phased approach to the preparation, response, and recovery from a debris generating incident. While understanding that every disaster is different, the phased approach will help the jurisdiction to have a good understanding of the actions that will need to be taken based on general time frames in the disaster timeline.

In addition to outlining steps to be taken in the process, Tetra Tech will also examine resources that might be brought to bear in the response. Included will be an assessment of current SOCRRA-RRRASOC and member community refuse/recycling collection and processing contracts to determine if they have the resources and if contracts are conducive to federal reimbursement guidelines. Tetra Tech will also review member community public works resources and the Oakland County disaster debris management plan to evaluate the county's and member community's existing capacity for debris management operations. Resources lists of equipment will be included with each jurisdiction specific appendix to the DDMP.

Tetra Tech will include in the plan guidance regarding staging areas, residential drop off sites, and curbside collection options for disaster debris collection as well as considerations for debris monitoring activities. The DDMP will seek to use existing, permitted solid waste and recycling processing and disposal facilities and will plan for use of Debris Management Sites (DMS), as necessary to temporarily store and reduce debris before it is recycled or removed for disposal. The DDMP will identify suitable locations for TDMS as identified by local agency staff and County Environmental Health staff, within each member community. Information will also be included regarding review of any Michigan emergency waiver of solid waste facility standard regulations to facilitate TDMS operations. A model design for TDMS

operations will also be included showing traffic flow, monitoring operations, materials storage and reduction. A set-up checklist, health and safety requirements, environmental considerations and relevant regulations will also be included in the DDMP.

The DDMP will discuss how existing collection/disposal services, pre-qualified contractor services and mutual aid services might be integrated in an organized response to a debris generating incident. The DDMP will also cover specialized debris operations and requirements such as private property debris removal, hazardous limbs, dangerous trees and stumps, contaminated debris, electronic waste (e-waste), white goods, vehicles, and masonry.

Public information will also be discussed in the DDMP with sample messages provided that can be tailored based on the phase of the debris operation. Public information will discuss the importance of residential separation of debris, the use of residential drop off sites, TDMS, the status of operations, and the use of social media to inform the public and dispel rumors.

Debris Reduction, Recycling & Disposal. The DDMP will utilize a debris reduction, recycling, and disposal strategy that identifies and plans to use materials management facilities and landfills within Oakland County, as well as sites within a 100-mile radius of the SOCRRA-RRRASOC service area. The plan will also identify procedures and facilities that will support maximum diversion of debris material before landfilling with documentation of diverted materials and either weights or cubic yardage estimates. Since donated goods can often become a disposal issue following a disaster, the DDMP will touch on donations management and who will have responsibility for managing donations following a disaster in the county.

Guidance for the procurement of contractors will be included in the DDMP including a checklist to aid jurisdictions in qualifying potential contractors in accordance with the Code of Federal Regulations. A scope of work for debris hauler services and an example of standard contract format will also be included. Resources to connect with potential debris service contractors will also be provided in the DDMP.

The DDMP will also provide tools to aid in tracking disposal and diversion of debris. Record templates will be developed using existing FEMA and State of Michigan guidelines or current/approved formats provided by both agencies. The documentation will track debris from origin to its final destination as is required for debris monitoring for each member community.

TASK 4: DRAFT PLAN REVIEW AND FINALIZATION

Following completion of the draft DDMP, the draft DDMP will be circulated for review to SOCRRA-RRRASOC member communities including their first responder agencies for review and comment not later than the fifth month of development. An online plan review meeting will be conducted to review the DDMP and solicit feedback. The final month (Month 6) will be used for SOCRRA-RRRASOC/DDPT review and submission to Michigan State Police for their staff review and approval. (Please note: Since elimination of the debris plan increased match incentive, FEMA no longer reviews DDMPs, but the DDMP will be developed to meet the requirements FEMA had outlined as part of the Alternate Procedures Pilot Program for Debris Removal). Plan finalization will include submission of the final plan with all required attachments to SOCRRA-RRRASOC.

TASK 5: TRAINING AND ORIENTATION

Following plan finalization, Tetra Tech will conduct an on-site one-and a half hour presentation to the SOCRRA-RRRASOC Board of Directors. The presentation will provide a high-level overview of the plan and the responsibilities of member communities, contractors, state, and federal agencies.

During the same trip as the Board of Directors training, Tetra Tech will also provide an onsite half day training to SOCRRA-RRRASOC and member community staff who will be responsible for implementing the plan at the local and operational area Emergency Operations Centers. In addition, Tetra Tech will provide a recorded training module that may be used by member communities to train other staff,

PLANNING TEAM

Exhibit 1: Tetra Tech Project Contact

Name	E-mail	Phone
Brian Rutherford	brian.rutherford@tetrattech.com	281-414-6741
Katelyn Tisch	katelyn.tisch@tetrattech.com	302-283-2278
Lisa Danner	lisa.danner@tetrattech.com	828-773-4724

Exhibit 2: Project Contact

Organization	Name	E-mail	Phone
RRRASOC	Michael Csapo	mcsapo@rrrasoc.org	248-910-6439
SOCRRA	Jeff McKeen	jmckeen@socwa.org	248-288-5150

PROJECT SCHEDULE/TIMELINE

Exhibit 3: Proposed Project Schedule

Phase	Target Date
Task 1: Project Initiation & Management Responsibility	
Project Planning Meeting	October 17, 2023
Work Plan	October 24, 2023
Project Kickoff Meeting	November 16, 2023
Task 2: Data Collection	
Data Gathering (including online meetings with jurisdictions)	November 2023 through January 2024
Task 3: Draft DDMP Development	
Draft DDMP	November 2023 to March 2024
Task 4: Draft Plan Review and Finalization	
Review of draft DDMP	March 2024
RRRASOC, SOCRRA, and Michigan State Police review of plans.	April 2024
Task 5: Draft DDMP Development	

Phase	Target Date
Board of Director Training	May 2024
Community Member Training	May 2024



Resource Recovery & Recycling Authority of Southwest Oakland County

20000 W. 8 Mile Rd
Southfield, MI 48075-5708
Office: 248.208.2270
www.RRRASOC.org

THE RECYCLING AUTHORITY
Since 1989

To: RRRASOC Board of Directors
From: Michael Csapo, General Manager, RRRASOC
Date: October 16, 2023

Re: **Food Waste and Organics Composting Discussion**

Action Requested

No action is requested at this time.

Background

Through both legislation and department policy, the State of Michigan has a goal of a 45% recycling rate. The State's current recycling rate is 21%. For this context, recycling includes traditional recycling, as well as composting and other material utilization techniques. The aggregate recycling rate for the RRRASOC communities was 36.2% in 2022.

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has goals of increasing Michigan's recycling rate to 45%, growing end-use recycling markets in a circular economy framework, and building the foundation for a decarbonized and thriving Michigan economy. As part of that effort, through the Renew Michigan program, the *NextCycle Michigan GAP Analysis* was completed to illuminate gaps in Michigan's recycling supply chain and identify actions necessary to meet the 45% goal on a statewide basis.

Germane to organics, among the findings in the *2021 Update* were the following:

- To increase Michigan's recycling rate to 45%, approximately 33% of the organics currently going to disposal will need to be captured for organics processing at compost or anaerobic digestion facilities;
- Additional organics recovery needs to have a major focus on food;
- There is a need to increase collection and processing infrastructure for organics, particularly food waste.

RRRASOC's View

RRRASOC supports improving the management of organics in general and food waste specifically. The increased composting of organic materials at scale is the next frontier of materials management and checks a great number of boxes related to environmental and sustainability goals and objectives.

For example, the benefits of composting include the following:

- Improves soil health by helping it retain moisture, nutrients, and beneficial organisms, making it more productive;
- Reduces the need for pesticides, fertilizers, and watering;

RRRASOC Member Communities

Farmington ♦ Farmington Hills ♦ Milford ♦ Milford Township
Novi ♦ South Lyon ♦ Southfield ♦ Walled Lake ♦ Wixom

- Helps soil be more resilient to erosion and storm water runoff, assisting with stormwater management;
- Diverting organics from landfills reduces the amount of fugitive methane emissions from landfills, while preserving landfill space to be used for materials for which there are no reasonable value-added alternatives.

However, before advocating any significant changes in local materials management programs to advance food waste composting, particularly residential collection programs, we feel that there are key items that need to be addressed as follows:

- The composting processing infrastructure must be able to, at scale, handle organics beyond grass and leaves and do so in a way that comports with best practices and helps achieve the aforementioned sustainability goals. Grass clippings and leaves have been banned from Michigan's landfills since 1995. Since that time, robust yard waste collection programs have been in place for most Michigan residential programs. However, the operational and compliance track record for the compost facilities to which those materials have been delivered has been varied;
- Michigan's regulatory framework must be equipped to adequately regulate composting facilities as they deal with increasing and more complex volumes of material. Recent changes to Michigan's Natural Resources and Environmental Protection Act (Part 115 Amendments) modernizes the State's solid waste and recycling regulations and improves the regulations pertaining to compost facilities. Those new regulations should be fully deployed and Michigan EGLE should be adequately staffed to ensure compost facilities operate in a way that comports with those new requirements. In some cases, local zoning laws and regulations will need to be updated to match the changing industry;
- Any new collection programs that are created must be deployed in a manner that is cost-effective and sustainable, as well as at scales that meet the needs of communities. The design of those programs should ensure they can help achieve the goals specified in State law while being consistent with State-required county materials management plans.

There have been some recent grant-funded pilot programs in Michigan, as well as some more long-term programs in Michigan and across the U.S. Collectively and individually, we need to better understand their experiences with regard to matters of cost, odors, vectors, community usage, contamination, and general program management. As those grant-funded programs mature, we'll be able to take those lessons, as well as the lessons from practices elsewhere, and integrate them into program development to take better organics management to scale within our communities.

Part 115 Amendments and Renew Michigan

As mentioned, amendments to Part 115 established new regulations and permitting processes for various materials management facilities, including compost facilities. The new law also reimagines and reinvigorates Michigan's county-based materials management process.

The Renew Michigan program, including NextCycle Michigan, has been helping nurture and grow Michigan's organics and composting industry. The program was established in 2018 as one of the outcomes of the work of the Governor's Recycling Council, established by Governor Snyder. The program has been providing grant funding, planning resources, and technical assistance to facilitate the growth of Michigan's circular economy and materials management industry.

Michigan EGLE staff will be on hand to provide a brief overview of composting in Michigan, including new regulations, the state of facilities in Michigan, pilot and grant-funded programs, and emerging opportunities.

My Green Michigan and Spurt Industries

My Green Michigan is a Michigan business whose mission is to provide convenient and effective solutions to divert organic waste to composting and turn food scraps into soil. More information about them is available at <https://www.mygreenmi.com/>.

Spurt Industries is a private, commercial composting facility located at the Wixom DPW and a partner of My Green Michigan. Spurt's Mission is to find alternative uses for organic waste products, reducing the need for landfill space and creating healthy gardens and landscapes all over Metro Detroit, while preserving and renewing the environment. More information about Spurt is available at <https://spurtindustries.com/>.

Bill Whitley from Spurt Industries will be at the meeting to provide more information about My Green Michigan and to provide a tour of the compost facility.



Resource Recovery & Recycling Authority of Southwest Oakland County

20000 W. 8 Mile Rd
Southfield, MI 48075-5708

Office: 248.208.2270

Fax: 248.208.2273

www.RRRASOC.org

THE RECYCLING AUTHORITY
Since 1989

To: RRRASOC Board of Directors
From: Michael Csapo, General Manager
Date: October 18, 2023

Re: Manager's Report

1. A policy statement on batteries was drafted. See agenda.
2. A proposed extension of the Simple Recycling clothing recycling program was received. See agenda.
3. The Disaster Debris Management Planning agreement between RRRASOC, SOCRRA, and Tetra Tech was executed and the initial planning meeting was held. See agenda.
4. A tour of the Spurt compost facility was arranged. See agenda.
5. A grant from The Recycling Partnership for a second sorting robot was awarded.
6. The fall HHW events began.
7. Work on various curbside contracts took place.
8. Installation of the Glacier scanners was completed.
9. One tour of the MRF was conducted.
10. The grant-funded promotion of multi-family recycling in Southfield continued.
11. Staff attended or presented at the following:
 - A. Michigan EGLE Outreach meeting;
 - B. City Open House in Farmington Hills;
 - C. HHW event in Novi;
 - D. NextCycle Michigan TAC meeting;
 - E. Jazz @ Your Blues at the Southfield Library.

RRRASOC Member Communities

Farmington ♦ Farmington Hills ♦ Milford ♦ Milford Township
Novi ♦ South Lyon ♦ Southfield ♦ Walled Lake ♦ Wixom

Check Register Report

Date: 10/18/2023

Time: 7:09 pm

Page: 1

RRRASOC

BANK: STANDARD FEDERAL BANK

Check Number	Check Date	Status	Reconcile Date	Vendor Number	Vendor Name	Check Description	Amount
STANDARD FEDERAL BANK Checks							
13954	09/25/2023	Printed		124	BLUE CROSS BLUE SHIELD OF MICH	October 2023	4,999.28
13955	09/25/2023	Printed		429	CHASE	Visa	2,420.88
13956	09/25/2023	Printed		63	JDCTEK LLC.	Laura's email	101.25
13957	09/25/2023	Printed		184	MISSION SQUARE	9/28/2023 Payroll-Plan #303663	1,243.14
13958	09/25/2023	Printed		148	PHOENIX INNOVATE	Flyers	1,129.00
13959	09/25/2023	Printed		25	RESOURCE RECYCLING SYSTEMS, IN	DS-August 2023	1,045.00
13960	09/25/2023	Printed		25	RESOURCE RECYCLING SYSTEMS, IN	CK-August 2023	4,010.43
13961	09/25/2023	Printed		126	SHREDCORP	FH Shred Day 9/12/2023	1,100.00
13962	09/25/2023	Printed		33	SQS, INC.	August 2023 appts	14,594.50
13963	09/25/2023	Printed		33	SQS, INC.	South Lyon batteries	707.12
13964	09/25/2023	Printed		33	SQS, INC.	Farmington batteries	490.68
13965	09/25/2023	Printed		33	SQS, INC.	South Lyon batteries	531.83
13966	09/25/2023	Printed		33	SQS, INC.	Farmington batteries	471.74
13967	09/25/2023	Printed		130	THE HARTFORD	October 2023	527.09
13968	10/05/2023	Printed		140	FIRE ROVER	October 2023	161.00
13969	10/05/2023	Printed		160	KASTLE SYSTEMS LLC	November 2023	1,118.00
13970	10/05/2023	Printed		164	LEE INDUSTRIAL CONTRACTING	Southfield MRF Install#89782 1	13,975.00
13971	10/05/2023	Printed		184	MISSION SQUARE	10/12/23 Payroll-Plan #303663	1,243.14
13972	10/05/2023	Printed		126	SHREDCORP	Wixom 9/19/23	550.00
13973	10/18/2023	Printed		124	BLUE CROSS BLUE SHIELD OF MICH	November 2023	4,999.28
13974	10/18/2023	Printed		429	CHASE	Visa	712.77
13975	10/18/2023	Printed		137	GFL ENVIRONMENTAL	September 2023	10,200.00
13976	10/18/2023	Printed		123	IRIS WASTE DIVERSION SPECIAL	September 2023	4,062.50
13977	10/18/2023	Printed		123	IRIS WASTE DIVERSION SPECIAL	Grant work-September 2023	12,843.09
13978	10/18/2023	Printed		164	LEE INDUSTRIAL CONTRACTING	Camera Electrical #90026 Rev 1	7,300.00
13979	10/18/2023	Printed		184	MISSION SQUARE	10/26/23 Payroll-Plan #303663	1,243.14
13980	10/18/2023	Printed		33	SQS, INC.	September 23 appts	12,221.00
13981	10/18/2023	Printed		130	THE HARTFORD	November 2023	527.09
13982	10/18/2023	Printed		121	TYLER TECHNOLOGIES, INC.	GL & AP	2,129.81

Total Checks: 29 **Checks Total (excluding void checks): 106,657.76**

Total Payments: 29 **Bank Total (excluding void checks): 106,657.76**

Total Payments: 29 **Grand Total (excluding void checks): 106,657.76**



P.O. Box 15284
Wilmington, DE 19850

RESOURCE RECOVERY AND RECYCLING
AUTHORITY OF SOUTHWEST OAKLAND COUNTY
20000 W 8 MILE RD
SOUTHFIELD, MI 48075-5708

Customer service information

-  Customer service: 1.888.400.9009
-  bankofamerica.com
-  Bank of America, N.A.
P.O. Box 25118
Tampa, FL 33622-5118

Your Public Funds Interest Checking

for September 1, 2023 to September 30, 2023

Account number:

RESOURCE RECOVERY AND RECYCLING AUTHORITY OF SOUTHWEST OAKLAND COUNTY

Account summary

Beginning balance on September 1, 2023	\$397,172.01
Deposits and other credits	300,225.17
Withdrawals and other debits	-125,000.00
Checks	-0.00
Service fees	-141.19
Ending balance on September 30, 2023	\$572,255.99

of deposits/credits: 2
 # of withdrawals/debits: 3
 # of days in cycle: 30
 Average ledger balance: \$602,104.21

Annual Percentage Yield Earned this statement period: 0.46%.
 Interest Paid Year To Date: \$1,365.55.



Oakland County Investment Pool
Position Report - Portrait
Investment

Oakland County Treasury

As Of October 5, 2023

Investment #		Managed Pool Accounts		(PA4)	
Fund		Begin Rate 1.3522312		Current 2.4862513	
CUSIP SYSTEM SYS		Rates as of 09/01/2023		Basis 365	
Issuer 99999 Pooled Investments		Interest Period ME		First Interest Due 06/01/2012	
Cert./Acct#		<input checked="" type="checkbox"/> Add Interest to Account Balance			
Dealer GASB 3		<input type="checkbox"/> Include in Yield Calculation			
Custodian		<input checked="" type="checkbox"/> Clearing Account			
Asset Class Cash and Equivalents S&P Moody's		Market Price 0			
Investment Class Book Value		Market Price Date			
Beginning Balance Date 10/01/2022		Last Withdrawal Date 10/01/2023			
Beginning Balance 617,564.25		Last Deposit Date			
Current Balance 626,467.91		Comment			
Deactivate Date		Current Fiscal Year			
Accrued Interest from Previous Fiscal Year 695.10		Interest Received to 9,150.60			

Passbook Transactions

Trans. Dat	Deposit	Withdrawal	Int. Rcvd.	Balance	Rate	Cd Receipt	Comments
09/01/2023	0.00	19.48	465.18	625,191.43		FI	Interest Earnings
09/01/2023	0.00	0.00	0.00	625,191.43	2.486	R	Interest Earnings
10/01/2023	0.00	18.87	1,295.35	626,467.91		FI	Interest Earnings

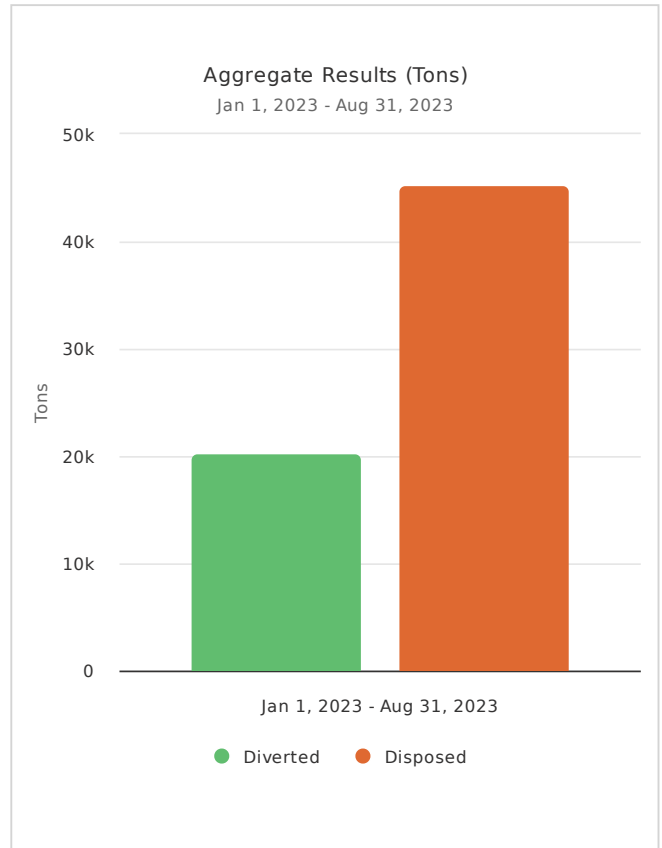
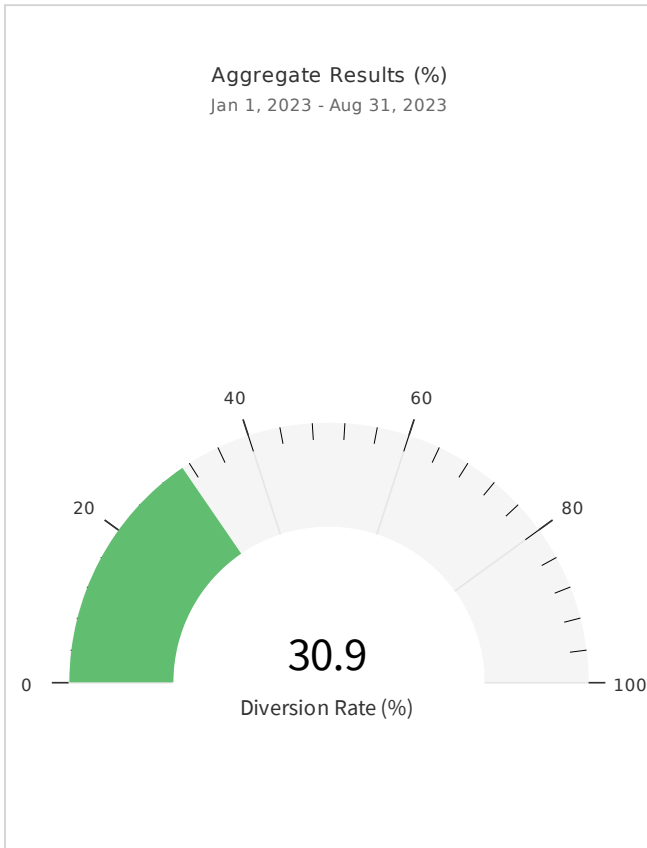
REVENUE/EXPENDITURE REPORT

RRRASOC

For the Period: 7/1/2023 to 9/30/2023

	Original Bud.	Amended Bud.	YTD Actual	CURR MTH	Encumb. YTD	UnencBal	% Bud
Fund: 596 - GENERAL FUND - ADMINISTRATION							
Revenues							
580.000 MEMBER CONTRIBUTIONS	388,858.00	388,858.00	374,588.55	0.00	0.00	14,269.45	96.3
645.000 REVENUE SHARING-RRRASOC	25,000.00	25,000.00	0.00	0.00	0.00	25,000.00	0.0
646.000 REVENUE SHARING-NON RRRASOC	1,200.00	1,200.00	0.00	0.00	0.00	1,200.00	0.0
647.000 HOST FEES	126,000.00	126,000.00	22,856.19	22,856.19	0.00	103,143.81	18.1
664.000 INTEREST INCOME	6,000.00	6,000.00	2,475.12	1,520.52	0.00	3,524.88	41.3
671.000 MISCELLANEOUS INCOME	60,000.00	60,000.00	0.00	0.00	0.00	60,000.00	0.0
Revenues	607,058.00	607,058.00	399,919.86	24,376.71	0.00	207,138.14	65.9
Expenditures							
702.000 SUPERVISORY SALARIES	132,311.00	132,311.00	35,622.16	10,177.76	0.00	96,688.84	26.9
703.000 PERMANENT SALARIES	65,480.00	65,480.00	17,629.22	5,036.92	0.00	47,850.78	26.9
705.000 OVERTIME	7,544.00	7,544.00	2,544.44	0.00	0.00	4,999.56	33.7
710.000 FICA	17,805.00	17,805.00	4,832.99	1,325.24	0.00	12,972.01	27.1
711.000 MEDICAL/DENTAL INSURANCE	69,250.00	69,250.00	22,105.48	5,526.37	0.00	47,144.52	31.9
712.000 UNEMPLOYMENT INSURANCE	1,046.00	1,046.00	0.00	0.00	0.00	1,046.00	0.0
713.000 WORKERS COMP.	800.00	800.00	0.00	0.00	0.00	800.00	0.0
715.000 ICMA	27,412.00	27,412.00	7,379.82	2,108.52	0.00	20,032.18	26.9
727.000 OPERATING SUPPLIES	750.00	750.00	0.00	0.00	0.00	750.00	0.0
728.000 OFFICE SUPPLIES	2,000.00	2,000.00	296.32	235.49	0.00	1,703.68	14.8
729.000 POSTAGE & MAILING	17,400.00	17,400.00	5,610.97	5,016.00	0.00	11,789.03	32.2
730.000 MAGAZINES & PERIODICALS	80.00	80.00	0.00	0.00	0.00	80.00	0.0
810.000 AUDIT	15,000.00	15,000.00	14,650.00	3,250.00	0.00	350.00	97.7
812.000 LEGAL COUNSEL	5,000.00	5,000.00	0.00	0.00	0.00	5,000.00	0.0
821.000 MEMBERSHIP DUES	1,000.00	1,000.00	499.00	0.00	0.00	501.00	49.9
822.000 CONTRACTUAL SERVICES-OTHER	150,800.00	150,800.00	48,370.36	25,604.81	0.00	102,429.64	32.1
822.002 DROP-PFF	165,000.00	165,000.00	25,172.00	10,868.00	0.00	139,828.00	15.3
822.003 HHW Wash	30,000.00	30,000.00	12,084.93	7,402.87	0.00	17,915.07	40.3
830.000 TELEPHONE	6,480.00	6,480.00	1,352.67	140.00	0.00	5,127.33	20.9
831.000 VEHICLE EXPENSE	4,800.00	4,800.00	1,200.00	400.00	0.00	3,600.00	25.0
835.000 COMMUNITY RELATIONS	8,700.00	8,700.00	1,100.00	1,100.00	0.00	7,600.00	12.6
836.000 PRINTING & PUBLISHING	48,915.00	48,915.00	16,823.97	3,426.50	0.00	32,091.03	34.4
840.000 BUILDING/LIAB. INS.	26,593.00	26,593.00	27,093.00	27,093.00	0.00	-500.00	101.9
850.000 EQUIPMENT MAINTENANCE	26,888.00	26,888.00	6,287.93	4,499.18	0.00	20,600.07	23.4
851.000 BUILDING MAINTENANCE	1,700.00	1,700.00	0.00	0.00	0.00	1,700.00	0.0
860.000 CONFERENCES & WORKSHOPS	2,000.00	2,000.00	0.00	0.00	0.00	2,000.00	0.0
890.000 MILEAGE EXPENSES	2,500.00	2,500.00	211.19	192.44	0.00	2,288.81	8.4
970.000 CAPITAL OUTLAY	45,000.00	45,000.00	21,106.19	21,106.19	0.00	23,893.81	46.9
975.000 COMPUTER SOFTWARE	685.00	685.00	305.63	123.10	0.00	379.37	44.6
978.000 OFFICE EQUIPMENT	2,500.00	2,500.00	1,619.85	1,619.85	0.00	880.15	64.8
979.000 CONTINGENCY	6,757.00	6,757.00	0.00	0.00	0.00	6,757.00	0.0
Expenditures	892,196.00	892,196.00	273,898.12	136,252.24	0.00	618,297.88	30.7
Net Effect for GENERAL FUND - ADMINISTRATION	-285,138.00	-285,138.00	126,021.74	-111,875.53	0.00	-411,159.74	-44.2
Change in Fund Balance:			126,021.74				
Grand Total Net Effect:	-285,138.00	-285,138.00	126,021.74	-111,875.53	0.00	-411,159.74	

Diversion Rate Report



Aggregate Results (%)

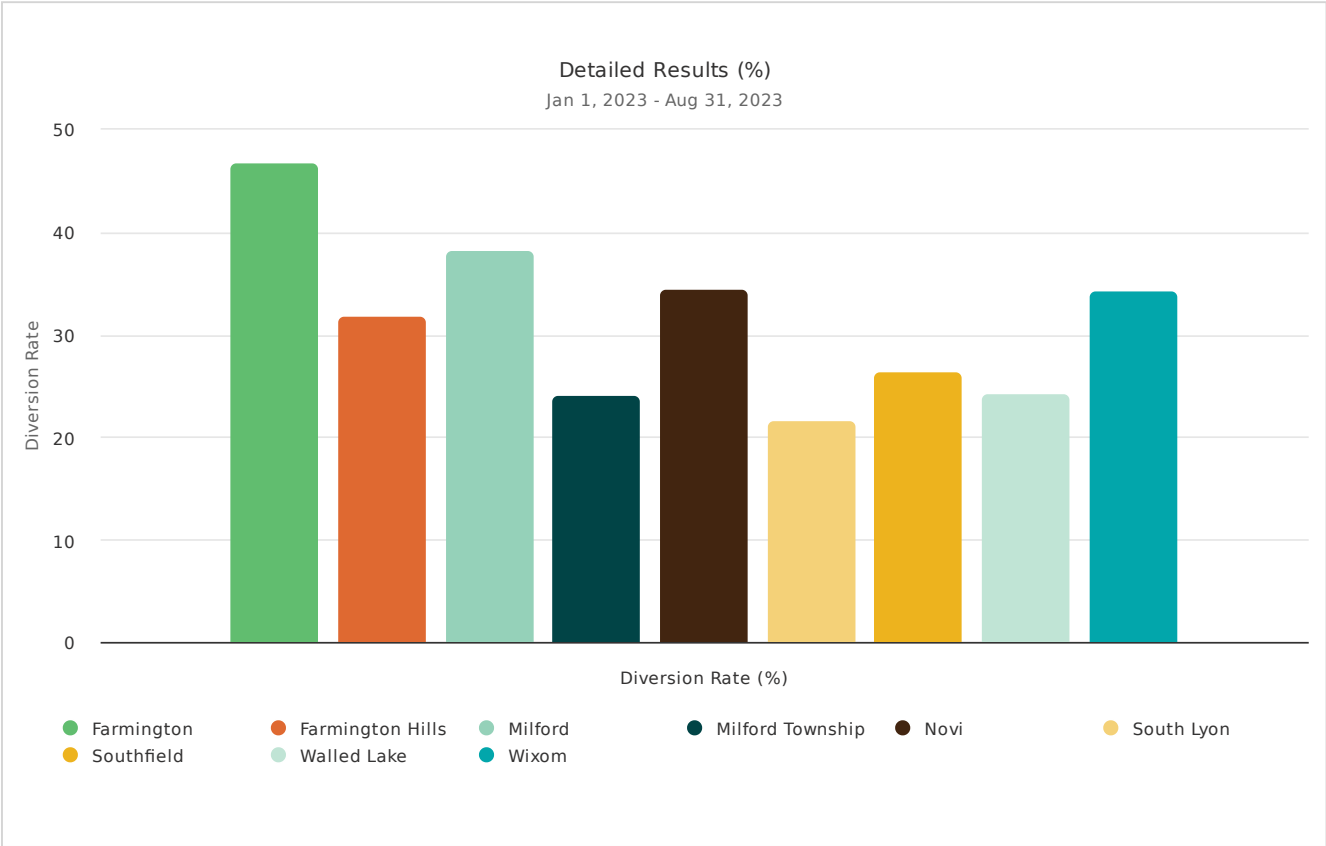
Showing data collected for: Jan 1, 2023 - Aug 31, 2023

ALL TIME	JAN 1, 2023 - AUG 31, 2023
Diversion Rate (%)	30.85

Aggregate Results (Tons)

Showing data collected for: Jan 1, 2023 - Aug 31, 2023

ALL TIME	JAN 1, 2023 - AUG 31, 2023
Diverted	20,128.51
Disposed	45,123.45
Total	65,251.96



Detailed Results (%)

Showing data collected for: Jan 1, 2023 - Aug 31, 2023

ORGANIZATIONS	DIVERSION RATE (%)
Farmington	46.78
Farmington Hills	31.80
Milford	38.11
Milford Township	24.04
Novi	34.33
South Lyon	21.56
Southfield	26.34
Walled Lake	24.22
Wixom	34.25



Resource Recovery & Recycling Authority of Southwest Oakland County

20000 W. 8 Mile Rd
Southfield, MI 48075-5708

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Fax: 248.208.2273

www.RRRASOC.org

THE RECYCLING AUTHORITY
Since 1989

To: RRRASOC Board of Directors
From: Mike Csapo, General Manager
Date: October 17, 2023

Re: **MRF Operations Report**

Attached are the MRF throughput figures through September of 2023. During the period, the MRF accepted more than 33,631 gross tons of material.

Nearly 10,716 tons, or 31.9%, came from RRRASOC Member Communities' programs in accordance with MRF Service Agreements or RRRASOC drop-off sites.

As shown on the attached graph, commodity prices remained volatile and below average but above the October 2022 low.

Please let me know if you have any questions or comments.

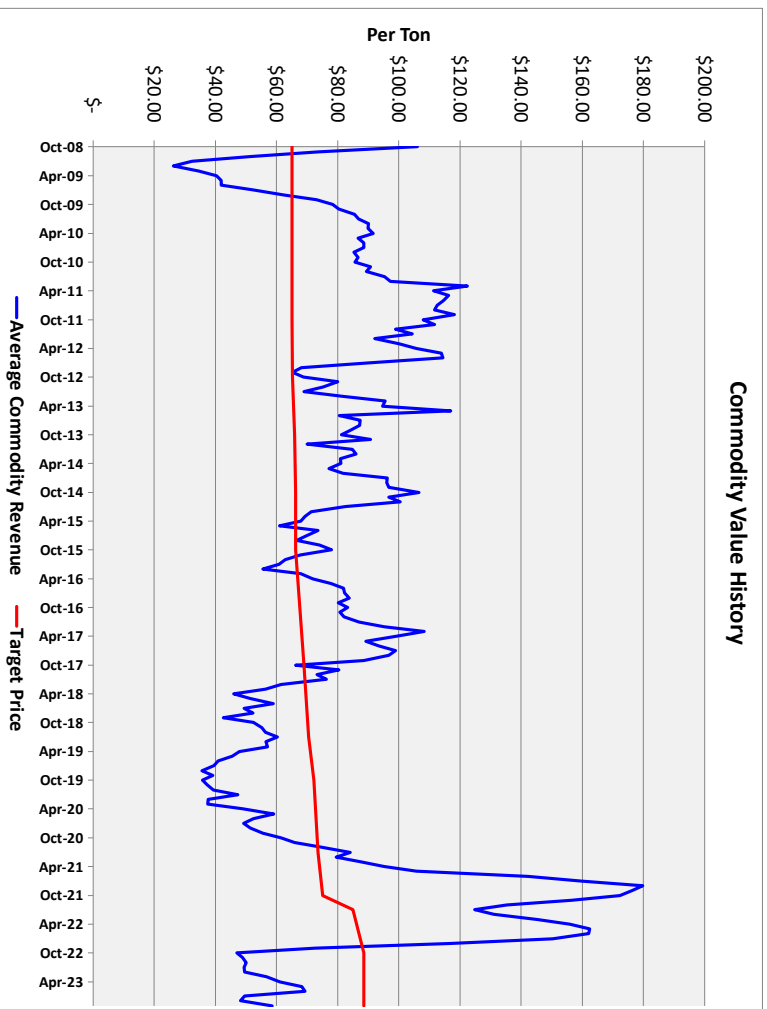
attachment

RRRASOC Member Communities

Farmington ♦ Farmington Hills ♦ Milford ♦ Milford Township

Novi ♦ South Lyon ♦ Southfield ♦ Walled Lake ♦ Wixom

MRF Throughput	Farmington	Farmington Hills	Village of Milford	Milford Twp	Novi	Novi DO	South Lyon	Southfield	Southfield DO	Walled Lake	Wikom	RRRASOC Total	Third Party	Total	RRRASOC %
Source:															
Jan-23	59.66	368.45	45.36	42.23	303.22	48.46	63.90	192.20	12.62	20.31	48.91	1,205.32	2,358.86	3,564.18	33.8%
Feb-23	57.40	280.88	25.44	33.23	232.65	38.73	96.54	136.49	14.32	20.68	49.04	985.40	1,800.28	2,785.68	35.4%
Mar-23	61.00	359.87	32.51	42.95	273.56	40.59	66.07	185.65	15.21	31.17	50.66	1,159.24	2,715.49	3,874.73	29.9%
Apr-23	51.49	336.96	31.13	49.84	244.50	72.02	61.95	165.82	20.54	20.59	59.94	1,114.78	2,601.86	3,716.64	30.0%
May-23	86.24	394.86	31.50	33.73	282.15	52.72	76.30	209.20	16.77	30.86	61.37	1,275.70	3,202.21	4,477.91	28.5%
Jun-23	85.57	429.94	55.14	56.28	300.39	58.28	59.46	209.12	16.42	37.82	72.72	1,381.14	2,686.03	4,067.17	34.0%
Jul-23	75.72	378.41	47.06	23.84	247.37	53.40	33.65	188.66	17.63	17.33	61.29	1,144.36	2,512.98	3,657.34	31.3%
Aug-23	76.41	442.67	46.17	38.40	291.01	46.38	52.62	177.25	13.12	28.04	62.23	1,274.30	2,598.50	3,872.80	32.9%
Sep-23	72.59	404.00	27.11	48.96	269.46	47.99	64.10	148.43	12.71	23.67	56.46	1,175.48	2,439.34	3,614.82	32.5%
Oct-23															
Nov-23															
Dec-23															
Total	626.08	3,396.04	341.42	369.46	2,444.31	458.57	574.59	1,612.82	139.34	230.47	522.62	10,715.72	22,915.55	33,631.27	31.9%
Average	69.56	377.34	37.94	41.05	271.59	50.95	63.84	179.20	15.48	25.61	58.07	1,190.64	2,546.17	3,736.81	31.9%





Resource Recovery & Recycling Authority of Southwest Oakland County

20000 W. 8 Mile Rd
Southfield, MI 48075-5708

Office: 248.208.2270
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Since 1989

**Minutes of September 28, 2023
RRRASOC Board of Directors Meeting
9:30 a.m.
Southfield Municipal Complex
City of Southfield Parks and Recreation
2nd Floor, Room 221
26000 Evergreen Road, Southfield, MI 48075**

1. Call to Order

Mr. Zorn called the meeting to order at 9:36 a.m.

2. Roll Call

Fred Zorn	Chairperson, Southfield
Don Green	Vice Chairperson, Charter Township of Milford
Gary Mekjian	Secretary, Farmington Hills
David Murphy	Farmington
Rachel Witherspoon	Milford Village
Jeff Herczeg	Novi
Steve Brown	Wixom
Paul Zelenak	South Lyon
John Michrina	Southfield
Patrick Ryan	Southfield
Martin Olejnik	Plante & Moran, PLLC
Keith Syzmanski	Plante & Moran, PLLC
Michael Csapo	RRRASOC
Laura Shaw	RRRASOC

All those in attendance introduced themselves.

3. Approval of Agenda

Mr. Zelenak moved to approve the agenda. Mr. Herczeg supported, and the motion passed unanimously by the Board.

4. Audience Participation

None.

5. Matters for Discussion/Action

A. Audit of FY 2022-2023 Financial Statements

Mr. Olejnik informed the Board that the audit for FY 2022-2023 was a clean audit with an unmodified opinion letter.

Mr. Csapo informed the Board that there was more revenue due to the Authority obtaining grants and Host Fees were unexpectedly higher.

Mr. Szymanski explained the audit in more detail.

Mr. Green made a motion to accept and file the Audit of FY 2022-2023 with the appropriate agencies. Mr. Murphy supported, and the motion passed unanimously by the Board.

B. Solid Waste Expenditure Study 2023

Mr. Csapo explained the Solid Waste Expenditure Study 2023.

Mr. Herczeg made a motion to review and accept the Solid Waste Expenditure Benchmark Study 2023. Mr. Murphy supported, and the motion passed unanimously by the Board.

C. ERG Environmental Contract Extension

Mr. Csapo explained the rate proposal from ERG Environmental for HHW services.

Mr. Green made a motion to accept the proposal from ERG Environmental to provide HHW services for CY 2024 & CY 2025. Mr. Mekjian supported, and the motion passed unanimously by the Board.

D. Curbside Contract Update

Mr. Csapo updated the Board on Curbside Contracts for Farmington, Farmington Hills, Southfield, and Walled Lake.

6. Manager's Report

Mr. Csapo updated the Board on the status of the Southfield MRF Robotics project. Mr. Csapo also updated the Board on the estimated costs due to the baler fire.

7. Other

None.

8. Consent Agenda

- A. Payment of Bills Report**
- B. Investment Report**
- C. Revenue and Expenditure Report**
- D. Material Management Report**
- E. MRF Operations Report**
- F. Minutes of April 27, 2023, Regular Meeting**

Mr. Murphy moved to approve the Consent Agenda. Mr. Mekjian supported, and the motion passed unanimously by the Board.

9. Adjournment

Mr. Murphy made a motion to adjourn at 10:26 a.m. Mr. Green supported, and the motion passed unanimously by the Board.