

Charleston Green Team Meeting

Tuesday, March 15, 2022

12:00 pm

Meeting Held Virtually

The public may view by Zoom at the following link:

<https://us02web.zoom.us/j/83735480918?pwd=a2w2OS9qMThMSW54cE1KY0lXc0E2UT09>

Passcode: 599183

Phone: 929-436-2866 or 301-715-8592

Webinar ID: 870 2654 5814

APPROVAL OF PREVIOUS MINUTES

2-15-2022

DISCUSSION AND APPROVAL

Further Consideration of Proposal from Gorilla Recycling

Approval of Letter to Environment & Recycling Committee (pending approval of agenda item #3)

New Appointee to Green Team

UPDATES

City Council Environment & Recycling Committee – Chair, Caitlin Cook

Communications – Linda Frame & Patti Hamilton

Other Updates

Establish Green Team priorities for 2022

Other business / announcements

Next meeting: (3rd Tuesday is April 19th; in-person meeting, A D room, 3rd floor, City Hall)

Adjourn

Green Team meeting minutes February 15, 2022

Attendees: Mayor Goodwin, Director Webster, Patti Hamilton, Linda Frame, James Young, Justin Marlowe, Emmett Pepper, John Butterworth, Ted Armbrrecht, Rod Watkins, Pam Nixon, and Nikki Smith. Patti called the meeting was called to order at 12:02.

Patti welcomed Mayor Goodwin to the meeting. \$250,000 in unassigned funds for the Green Team has been allocated. \$500,000 additional is proposed into Green Team's budget. Budget now includes money for recycling bins. She expressed her full support for the Green Team. The Mayor wants a robust sidewalk program. Additionally, Team Up to Clean Up events are coming up soon and Mayor Goodwin asked for help with promoting them.

Patti asked for a motion to approve the minutes from the January 2022 meeting. Rod moved. James seconded. Unanimous.

Guest Speaker: Tom Aluise

Patti introduced the meeting's guest speaker: Tom Aluise with the WV DEP Youth Environmental Program. His department works with scouts, sports teams and other youth groups to promote recycling, water conservation and other environmental issues. The focus is on K-8 grade. Partners are always needed.

James asked if Tom works with other communities. Tom works statewide and gave the example of Mason County 4-H which is heavily engaged.

Ted brought up the large amounts of cardboard and how to best educate people on how to recycle them. He asked for success stories on glass. Tom suggested social media. He said that glass is really hard to recycle in the Kanawha Valley. Cabell County recycles glass. A company from Ohio comes to pick it up. They allow anyone to come but you have to pay for a fob. Ted suggested getting large box stores to use empty trucks to truck the glass out after a delivery.

Linda asked about Tom sharing info so the Green Team can produce educational videos.

Emmett discussed a recycling facility in Charleston instead of taking it to Raleigh. He asked for the best areas to target such as schools or big businesses as well as how much contamination is allowed in collected materials. Tom said each facility is different and it depends on their machinery. He suggested targeting places that use a lot of paper right now since the market is good for those materials, as well as metals and aluminum.

Tom can supply bags and gloves for clean ups and arrange for pick up of the collected trash.

Patti suggested that Linda and she get together with Tom to discuss promoting recycling.

Team Up to Clean Up

Patti invited John Butterworth with the City Planning Department to talk about Team Up to Clean Up events. They are from 9AM – 1PM on Saturdays in April.

- April 2: downtown
- April 9: Kanawha City
- April 23: North Charleston and West Side
- April 30: South Hills

Patti suggested we involve organizations we are members of to help get the word out. Emmett asked about trail opportunities in South Hills. John answered that a 70-acre tract of land, the Jones Tract, near Holz elementary is being developed to connect it with other trail systems. Linda asked if motorized vehicles are allowed. John said the land is deeded against that.

Gorilla Recycling Proposal

Patti asked for a motion if there is interest in discussing Gorilla Recycling's proposal. Ted moved and Linda seconded. To discuss.

Emmett clarified that we would send this to the Mayor and copy the committee. Rod mentioned recycling report done in 2021 and that Gorilla's proposal comes close to fulfilling the report's goals. Pam asked if this is a MERF or a recycling facility. Rod said it's a plastic recycling center. MERF would need approvals and permits.

Linda asked about the term plastic recycling and that the need is not limited to that. She also suggested that we pass along this proposal but the city would need to work on the details. Ted asked if there are other facilities show a success story. He stressed that glass is a critical component. Patti suggested that Gorilla provide references.

Emmett recommended that the Green Team provide early questions to the Recycling Committee. For example, could the facility be placed at Slack Street? This would be Gorilla's first facility of this kind. James agreed that the Green Team provide the proposal to the Environmental and Recycling Committee so they can do further vetting. Linda suggested that solar is part of the proposal that is forwarded.

Rod said Gorilla doesn't have other facilities that are this small and that the company has adjusted to the tonnage that is possible for this project. It is unique because it is small. And it would need clean recyclables.

Patti asked for clarification on process of sending the recommendation to the Mayor and the Environmental and Recycling Committee. She will ask for a final proposal from Gorilla including clarification of the term "plastic" and requesting success stories to include with the proposal. Does the team have to review the letter? Nikki said that letter can be sent to each member. Emmett said we could vote on the conceptual nature of the letter.

James pointed out that it is not our role to continue to deliberate over the details. Linda suggested that we are passing this along to the committee for them to more fully vet. Ted had concerns with us not doing more research before we forward this on. He thinks this would cause concern about the Green Team by City Council. Pam agreed with Ted and she doesn't want the city to have concerns with our recommendations. James said these questions about process also include how best to interact with committee and send them proposals.

Patti asked for a motion to state that she will email Gorilla some questions and ask for references to add to the proposal. Ted moved and James seconded. Unanimous. Patti will report back at the March meeting.

Patti agreed that we do need clarification on our role.

New appointees

Patti submitted names of potential nominees discussed at previous meetings.

Updates

Emmett – no update from Environmental and Recycling Committee. Patti asked if we could be on the agenda to discuss our role.

Communications – Linda attended recycling committee meeting to introduce the GREEN team. Patti attended finance committee when funds were approved for green initiatives.

Emmett added that there were some HVAC systems slated for two community centers and suggested that maybe funding could be used to do a demonstration project with the Kanawha City Community Center (not one of the two slated for upgrades).

There were no other updates.

Patti would like to hold a separate meeting to discuss our future plans and to discuss the new funding and opportunities it creates.

Pam said that Carol Brockmorton is available to give an overview of the WV Solid Waste Management Board at the April meeting to include recommendations for a different types of recycling facilities.

The next meeting is March 15, 2022 at noon by Zoom.

April's meeting may be in person. Patti asked Nikki for a location. She recommended the AV room on third floor of City Hall.

James moved to adjourn and Linda seconded. Unanimous. The meeting adjourned at 1:30PM.



gorilla recycle

PROPOSAL

March 9, 2022

The City of Charleston
Kanawha County, WV

Ms. Patti Hamilton ,Green Team Chair, Council member Caitlin Cook, Environment and Recycling Committee Chair, City of Charleston Green Team, Mr. Emmett Pepper, Councilman, Environment & Recycling Committee, City of Charleston

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We are Gorilla Recycle LLC based in the USA seeking an opportunity to build a turnkey, recyclables processing facility in Kanawha Valley County. Our design is unmatched in the industry and the safe operation will yield best in class purity of all recyclable materials.

The world is seeking a sustainable solution for recovery of all renewable materials and the opportunity for the City of Charleston and all the Greater Kanawha County to participate is now available. Our design includes state of the art sorting equipment and is affordable because of sizing and efficient design. Our equipment is made available from renowned industry international suppliers.

Our project can be completed in 120 – 150 days from day of equipment delivery (4-6 months) and all we need is 3 acres of land, proper ingress and egress, tie-in to utilities, local labor force and a single stream of recoverable material. We are willing to share our revenue stream with the City of Charleston and the percentage is negotiable based on several factors including payback to our investors and total feed to the facility.

The footprint for our facility is expandable from 4 to 5 tons per hour which is adequate to meet the needs of the Greater Kanawha Valley population (60,000) and expandable up to 20 tons per hour. This is more than enough capacity to handle neighboring communities in the future.

Recoverable commodities include aluminum (40% of revenue), ferrous metals, all grades of paper and plastics. What makes our design and process unique is that with a push of a button, we can recover 96+% purity of any single commodity and bale it before being shipped to end users or brokers. The purity of our recovered material

is second to none and will create a new standard in the industry. Consequently, Charleston and the state of West Virginia will be an industry leader.

To facilitate your decision regarding the approval of our facility, we reference “**FINAL REPORT – Feasibility Study for the Recycling Program, January 14, 2021**” Section 5 RECOMMENDATIONS.

- **Sustainable, Equitable Waste Management Revenue Mechanism** – Although a feed of mixed stream is possible to our facility, the operation is much more efficient with a single stream of recoverable materials. A tip fee of \$30 per ton (compared to the current cost of \$175) will be realized. KV will participate in the revenue generation and this percentage is negotiable.
- **Waste Management Organizational Structure** – Gorilla will hire and train local individuals for the safe operation and management of the facilities. This will include manual sorter, technicians/mechanics, and management personnel. Gorilla will be fully responsible for the organizational structure while being completely transparent in our operation with the KV. This will include attendance of trade shows, conferences, and best practices.
- **Optimized Refuse and Bulk Waste Collection Services** – With the assistance of The Recycling Partnership and other partners, the education of the community for successful collection and contamination management of the recoverable materials will be a key. It will take time and persistence but absolutely achievable as demonstrated and practiced in many parts of the USA and the world.
- **Transition to Cart-based Collection** – Together we can work with our partners to make carts available to all residents with grants and assistance from our investors.
- **Develop a Comprehensive Recycling Education and Outreach Strategy** – Education is necessary for the successful operation of our facility. Our education process will be continuous, and the outreach will be to all neighboring communities to welcome participation. Our National Tour Bus will travel to schools, hand our program literature, and engage with city officials.

We can meet and exceed all recommendations on the report and look forward to future discussions involving the approval and acceptance to build and operate our facility.

Frank S Hernandez, Scottee Newkirk
CEO, Founder Gorilla Recycle LLC



Business Opportunity

Current recycling infrastructure and businesses cater to large metropolitan areas in the U.S. This leaves a vast majority of rural and smaller communities in the U.S. without recycling infrastructure or underserved with costly and inefficient recycling programs. These same communities have no choice but to incinerate or worse, landfill valuable resources.

Company Description

Gorilla Recycle has been created to provide efficient, near-zero carbon footprint, turnkey recycling facilities for small to medium communities or regions in the U.S. This solution can also be applied globally.

Team

Core Team: Scottee Newkirk, founder; Frank Hernandez, CEO; Dave Finnman, CFO

Other Team Members/Advisors: Steve Pilato, West Virginia advisor

Luke Bingham, design and construction advisor

Nick Doyle, advisor, Tomra Sorting Systems, Inc.

Rutger Zweers, advisor, Sparta Manufacturing, Inc.

Industry Analysis

The heart of the recycling business is the successful and safe operation of a full processing facility. It is where recyclable commodities, collected at households or businesses, are delivered for sorting by type, to be baled or bundled. These commodities are then sold to brokers or mills to be used again in a manufacturing process. Partnering with end-users will be a challenge but large metropolitan areas already have established outlets that can be leveraged. End uses for all commodities is continually evolving along with profitability in the U.S. and the world since China stopped taking a large portion of our commodities.

Target Market

The Gorilla processing facility is designed to accommodate communities or regions with a population base of 50,000 to 200,000. There is little to no competition in these target markets in the U.S. and we estimate over \$150MM people can benefit from our facilities. Current collection methods can be used to route the necessary single stream to the facility.

Implementation Timeline

Gorilla Recycle can construct a turnkey facility within 120 – 150 days after a contract is signed depending on equipment delivery and weather conditions. Industry experts, managers and construction leaders are available to Gorilla Recycle and will

be brought on board as needed to oversee and manage the construction. Gorilla Recycle is fully prepared to own and operation the facility until the community is ready for a smooth transition of ownership.

Marketing Plan

Gorilla Recycle has a network of individuals familiar with the recycling industry throughout the U.S. Each facility is fully customized to meet the needs of a specific community. An alliance with the Recycling Partnership who has a similar mission of providing a domestic recycling solution is available for consultation and grants.

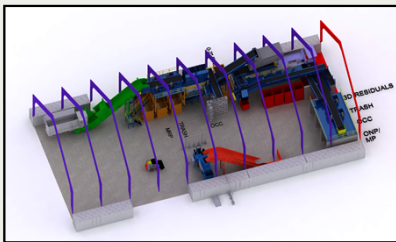
Financial Summary

Gorilla Recycle will realize a net operating margin of +\$2MM per year, depending on the feed to the facility and commodity pricing. Financial modeling and revenue forecast is available, and we plan to be fully transparent regarding the operation and revenue sharing with the KV.

Funding Required

Exact costs will be determined at the contract date for the highly customized facility. Negotiations with our investors will ultimately determine how much revenue we can share with KV.

Gorilla Scope & Performance



* Depends on Op Costs, Feed Rate and Commodity Pricing. Tipping Fee of \$30/Ton

SCOPE

- In-feed Material: Commercial and Residential single stream
- Capacity: 4 - 10 tph (expandable to 20 tph)
- Personnel: 7 Manager, Mechanic and Sorters
- Total Area Required: 3 acres
- Gorilla facility built on reinforced concrete foundation & optional climate controlled
- Optional Solar Power Plant - Electric Grid is the backup or Diesel Generator
- Gorilla includes general contracting, commissioning and training

PERFORMANCE PROJECTIONS

- Rate of **Recovery/Purity: +87%/+96%**
- System Uptime: > 90%
- Cost \$/processed ton: \$30-40 / ton
- Net Margin: \$139 / ton with Solar
- Estimated ROI: 5 - 6 years *

Secondary Markets

Recovered Materials	Potential End Users
OCC	Newport Trading, Blackbridge Investments, Clean Tech, Georgia Pacific
ONP/Mixed Paper	Newport Trading, Blackbridge Investments, Clean Tech, Georgia Pacific
PET	Newport Trading, Blackbridge Investments, Clean Tech, Georgia Pacific
HDPE	Newport Trading, Blackbridge Investments, Clean Tech, Georgia Pacific
3-7 Mixed Plastics	Newport Trading, Blackbridge Investments, Clean Tech, Georgia Pacific
Ferrous Metal	Newport Trading, Blackbridge Investments, Clean Tech, Georgia Pacific
Non-Ferrous Metal	Newport Trading, Blackbridge Investments, Clean Tech, Georgia Pacific
Mixed Glass and Rejects	LANDFILL (New Markets Emerging)

- **Regional End Users will have to be ascertained**
- **Brokers** are also an optional market - direct to end users is preferred
- **+96% Pure Commodities** creates a new product that makes the Gorilla-mrf unique in the industry

To: The Honorable Amy Goodwin, Mayor
The Honorable Caitlin Cook, Chair of Environmental & Recycling Committee

From: Charleston Green Team
Patti Hamilton, Chair
James Young, Vice-Chair
Linda Frame, Secretary
Ted Armbrrecht
Justin Marlowe
Rod Watkins
Pam Nixon, Advisory Member

Re: Proposal from Gorilla Recycling

Date: March 15, 2022

Your Charleston Green Team approved the attached proposal as worthy of consideration by the Environmental and Recycling Committee. We had a detailed discussion by Zoom with Steve Pilato and Scottee Newkirk, representing Gorilla Recycling, at our January meeting. They followed up with a proposal for consideration at our February meeting. We responded with a few questions and suggestions and have concluded that there is merit in the proposal and it should be reviewed and vetted by the members of the Environmental and Recycling Committee. We recommend that you request a presentation from Mr. Pilato and Mr. Newkirk as they provided to the Green Team.

Thank you for your consideration and please feel free to contact us if you have any questions.