



March 6, 2018

City of Battle Creek
 Carl Fedders- Assistant DPW Director
 150 S Kendall St.
 Battle Creek, MI 49037

RE: Composting Demonstration Project Proposal Revised

Dear Mr. Fedders,

Sustainable Generation (“SG”) is following up from the recent meeting regarding a Proposal for a Compost demonstration Project using GORE® Cover technology for **City of Battle Creek (“Battle Creek”)** for biosolids composting. The purpose of the project would be for BATTLE CREEK to gain experience in using the technology for composting biosolids, yard waste, and other organic waste to prove that the safe, simple, and scalable solution will work in this environment. SG can customize this proposal to meet the business needs. This proposal is valid for 60 Days.

The SG Mobile™ System with GORE® Cover provides a sustainable and proven composting solution. The GORE® Cover technology is a proven covered aerobic composting process that has been recognized by the EPA’s Pathogen Equivalency Committee for meeting 503 requirements to produce a Class A biosolids compost. The GORE® Cover technology has been recognized by the San Joaquin Valley Air Quality Management District for meeting VOC emission reduction requirements as described by Rule 4565, Rule 4566 and BACT (Best Available Control Technology); and, has been recognized by South Coast Air Quality Management District (SCAQMD) for meeting VOC and ammonia emission reduction requirements as described in Rule 1133.3.

The SG Mobile™ with GORE® Cover is flexible in design and is simple and low cost to operate. It is also expandable to scale up as your composting program develops. Based on our experience and knowledge of your site, SG could have a demo system delivered, installed and your operations team trained within 12-16 weeks from an agreement.

Item	Configuration	Pricing (\$USD)
SG Mobile™ System	Standard Heap Design – Demo System	
	<ul style="list-style-type: none"> • Mobile Box System with GORE® Cover • On-Floor Aeration • 82 ft. length x 26 ft. width x12 ft. height 	
	6-month Lease: 3 Batches (8-week process each batch)	Included
	Project Summary Report	Included
	Commissioning/Decommissioning Services	Included
	6-month TOTAL	\$49,000.00
	Lease Extension (per month)	\$5,000.00



Our proposal provides information relevant to the scope of the supply of equipment and services provided by SG. Any equipment and services (such as mixing, screening, front end loader, etc.) not related to the composting system shall be provided by the owner's project team (or supplied by other).

SG is ready to support your project with our team experience gained from the 200+ installations worldwide that are successfully using the GORE® Cover.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brett Hoyt", is positioned above the printed contact information.

Brett Hoyt
VP Business Development
Sustainable Generation
110 S. Poplar St., Suite 400
Wilmington, DE 19801
Email: brett.hoyt@sustainable-generation.com
Phone: 303.699.1585



**SG Mobile™ System with GORE® Cover
Demonstration Project Proposal
For
City of Battle Creek (“CUSTOMER”)**

March 6, 2018

Sustainable Generation in the following is referred to as “SG”
W.L. Gore & Associates in the following is referred to as “Gore”

Prepared by Brett Hoyt- email: brett.hoyt@sustainable-generation.com phone: 303-699-1585

Prepared For CUSTOMER:

City of Battle Creek
Carl Fedders- Assistant DPW Director
150 S Kendall St.
Battle Creek, MI 49037

Purpose:

The purpose of the demonstration project is to enable CUSTOMER to evaluate the GORE® Cover technology, the operational process, and the system performance at its facility. The goal is to validate that the SG Mobile™ System utilizing the GORE® Cover is an approved solution for the organic residuals treatment application in the CUSTOMER’s environment.

The project will test and provide results for the following:

- Input material mix ratio as follows: (starting mix recipe values)
 - Feedstocks: Horse Manure, Food Waste, Yard/Wood Waste
 - C:N ratio of 1:25 to 1:30
 - Moisture between 55%-65% (or 35% to 45% dry matter)
 - Adequate porosity +35% to promote positive aeration in the process
- Finished product quality for producing an EQ (exceptional quality) compost



- Control of odors and emissions:
 - Odor evaluation by SG, Gore, and CUSTOMER using non-scientific methods (nose) to determine effectiveness of trial process for any noticeable odors
 - Emission testing (i.e. VOC) is not part of this trial.
- Validate design, operational and environmental considerations for the composting application
- Confirmation of treatment time for system sizing, construction and design considerations

Sustainable Generation (“SG”) is the Authorized GORE® Cover Technology and Service Provider in North America and will be the project manager for the proposed Demonstration Project. There will be a collaborative effort during the project and subsequent review of the project results the CUSTOMER, SG, and W.L GORE & Associates (“GORE”).

During and after the project, results will ONLY be shared between CUSTOMER, SG and GORE. Any data collected during the pilot study is to be mutually shared between CUSTOMER, SG, and GORE. Data may only be reproduced and shared with 3rd parties with the mutual written approval of SG. This includes, and is limited to, the rights to publish the outcome as a case study or for use in official statements for reporting purposes with regulatory authorities.

SG Mobile™ Scope of Equipment Supply:

UNITS	ITEM	DESCRIPTION
1	GORE® Cover	For a windrow dimension of 85 x 26 x 12 feet (length x width x height)
1	SG Mobile™ System	Portable box designed as a mobile system including: <ul style="list-style-type: none"> • Process Control System • Aeration System blower • Power System • Communications System
1	Temperature Probe	Continuous measurement temperature sensors
1	Oxygen Probe	Continuous measurement oxygen sensor
2	Data Cables	Data cables for Oxygen and Temperature probe
1 set	Above Ground Aeration Piping	Two 6-inch HDPE piping each 90 feet long with end caps and SG aeration hole pattern drilled
1 set	Perimeter Cover Weighting System	Twenty-four 3-inch HDPE piping each 10 feet length each filled with sand and capped ends. Twenty-five filled sand bags

All equipment and components are the property of Sustainable Generation

Any damage or lost components shall be replaced by CUSTOMER. SG will invoice any damaged or lost components not replaced by CUSTOMER to CUSTOMER.



SG SmartStart™ Services Scope of Supply:

UNITS	ITEM	DESCRIPTION
1 Day	Project Planning	Kickoff Meeting (WebEx/Site Walk) for project plan development
2 Days	Mobilization	<ul style="list-style-type: none"> • Installation of Demo unit • Setup of aeration system • Software Configuration • Training for Operators
5 Days	Project Management and On-site Supervision	<ul style="list-style-type: none"> • Initial Recipe Mix • Phase 1 Heap Construction • Phase 2 Heap Construction • Phase 3 Heap Construction • Screening
1 Day	Demobilization	Prepare equipment for shipment back to SG
24/7/365	Technical Support	SG and GORE will be available to provide technical support throughout the duration of the project via phone, internet, and On-site (24-48 hours allowance to travel to project site)

SG will be responsible for the SG Mobile™ System mobilization, configuration, and on-going operation of the unit during the project, and de-mobilization of the system. SG personnel will be on-site during all major steps in the process including to mobilize the system, commissioning, training, supervise the initial building of the heap, supervise the flipping of the heap between phases, inspect the final product produced at the end of the process and to de-mobilize the system.

SG will provide pre-treatment recommendations and be available throughout testing for technical support, recommendations and general support. Pre-treatment is defined as the activity associated with receiving and mixing of the feedstock materials into the mix recipe in preparation for entering the composting process.



CUSTOMER: Responsibilities and Site Requirements:

UNITS	ITEM	DESCRIPTION
1	Equipment Acceptance	Receive pilot equipment and store prior to installation.
1	Site Pad	Minimum 200 ft. x 50ft. solid ground (concrete, asphalt, or as approved by SG)
1	Electrical Connection	480v 3-phase 10-amp circuit to be installed and connected by licensed electrician. Other power configurations may be available. Ask SG for details.
All	Permitting	Obtain permits and approvals per the State or Local governing approving authority.
250 Ton Batch	Feedstocks for Mix Recipes	Adequate feedstock and bulking agent for 250-ton heap <ul style="list-style-type: none"> • 1:1 by weight or 1:3 by volume • C:N of 25-30:1 • 55-65% Moisture Content • Minimum 35% porosity
1	Pre-treatment	Grinder/Shredder/Mixer or other for material recipe mixing Pre-treatment is defined as the activity associated with receiving and mixing of the feedstock materials into the mix recipe in preparation for entering the composting process. Mixing equipment to be supplied by other.
1	Material Handling Machine	Front-End Loader or other machine for building heap 12 ft. high
1	Installation and Start Up Assistance	Assist SG Technician in the startup checklist and system testing to ensure proper functioning of the equipment
3	Heap Construction	Building of the heap, GORE® Cover placement, weighting system placement, flipping of heap for Phases 1-3
1	Post-treatment	Screening of final product
1	Equipment Shipment	Pickup by carrier of equipment for shipment back to SG
1	Lead Operator	Designated Single Point of Contact who will be responsible for operation of control system and system reporting
8	Laboratory Testing	Sample, ship, and lab testing per SG protocol. All laboratory testing costs re CUSTOMER responsibility. Lab results shared by CUSTOMER, SG, and Gore.
Required	Insurance	Proof of Insurance is required



Pricing Terms:

Lease pricing for SG Mobile™ System with GORE® Cover and Services as described:

6 Month Lease: 3 Batch cycles (8-week process)

\$49,000.00 (Forty-Nine Thousand Dollars)

- Project Summary Report: INCLUDED
- Commissioning/Decommissioning Services: INCLUDED
- Inclusive of shipping to and from CUSTOMER site

Payment Terms:

- **\$20,000.00 (Twenty Thousand Dollars)** to be paid upon acceptance of this Proposal.
- **\$20,000.00 (Twenty Thousand Dollars)** to be paid upon completion of commissioning of equipment at CUSTOMER's site.
- **\$9,000.00 (Nine Thousand Dollars)** to be paid at completion of first 6-month lease period.

All payments received past the payment due date will be charged a late payment fee.

Lease Extension Terms:

Monthly Lease Payment: \$5,000.00 (Five Thousand Dollars)

- Includes equipment and support

Lease Extension Time Period: 1 month minimum.

CUSTOMER to notify SG in writing 30 days prior to the termination of the Lease Extension.

Insurance Term:

Proof of Insurance – provide proof of Insurance is required, Sustainable Generation LLC to be named as Additionally Insured Minimum of \$100k USD for SG Mobile™ System with GORE® Cover.



Proposal acceptance subject to SG Confirmation.

Equipment delivery time is subject to SG's confirmation.

Estimated delivery time is 12-16 weeks.

Delivery time starts with Order Confirmation from SG and receipt of first payment from CUSTOMER.

Validity of this Proposal is 60 Days from Date of Offer.

Please return approved quotation by:

- Scan/email to: brett.hoyt@sustainable-generation.com
- Mail 2 Originals to:
Sustainable Generation, LLC
110 South Poplar Street, Suite 400
Wilmington, DE 19801

Date of Offer: March 6, 2018

Proposal Accepted:

Brett Hoyt
VP Business Development
Sustainable Generation LLC
110 South Poplar St., Suite 400
Wilmington, DE 19801

Signature: _____

Print Name: _____

Title: _____

Company: _____

Date: _____

**Demonstration Project:
250 Ton Batch Heap Design with Above Ground Aeration**



LEFT: SG Mobile™ System

MIDDLE LEFT: Above Ground Aeration Piping

MIDDLE RIGHT: Pulling the aeration piping before flipping the heap.

LOWER LEFT: Building a heap

LOWER RIGHT: GORE® Cover with perimeter weighting system and wind strap





UPPER LEFT: Oxygen (blue) and temperature (red) probes inserting through cover

LOWER LEFT: SG™ Mobile System Box and aeration system piping.

LOWER RIGHT: Technician inserting probes into pile through the GORE® Cover

