



Date: 01/04/2016

**COMPANY INFORMATION**

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| <b>Company Name:</b> Digested Organics LLC |   |
| <b>Phone:</b> 734.545.8016                 | <b>Web Site:</b> http://www.digestedorganics.com/ |
| <b>Address:</b> P.O. Box 3386              | <b>City:</b> Ann Arbor                            |
| <b>State:</b> MI                           | <b>Zip Code:</b> 48106                            |

**BUSINESS CONTACT**

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| <b>Name:</b> Robert "Bobby" Levine               |
| <b>Phone:</b> 734.545.8016                       |
| <b>Email:</b> robert.levine@digestedorganics.com |
| <b>Address:</b> P.O. Box 3386                    |
| <b>City:</b> Ann Arbor                           |
| <b>State:</b> MI                                 |
| <b>Zip Code:</b> 48106                           |

**TECHNICAL CONTACT**

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| <b>Name:</b> Robert "Bobby" Levine               |
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| <b>City:</b> Ann Arbor                           |
| <b>State:</b> MI                                 |
| <b>Zip Code:</b> 48106                           |

**BUSINESS HISTORY**

**How long have you been in business?** 2 years

**Are you part of a larger company?**  Yes  No

**Did you exist as another company before this company was formed?**  Yes  No

*If so, what was that company's name?*

Yes, parts of the technology are left over from ReGenerate an entrepreneurial company developed by graduate students at the University of Michigan

**Number of employees?** 5

**What is your business structure?** Limited Liability

**What types of insurance and or surety do you provide?**

Performance guarantees (biogas & clean water per gallon of raw manure within 6 months)

**References. Please provide customers or colleagues with whom we can discuss your business and performance.**

*Please include a separate list with company name, location, contact name and contact information.*

Majestic Crossing Dairy, Sheboygan Falls, WI

**Describe your business service(s).** *For example: consulting, development, engineering, equipment sales, finance, other.*

Equipment sales, development, engineer

Service contract, farm operates, farm pays a fee per gallon processed (\$0.01 per gallon). Service fee does not include utilities. Does include chemicals, consumables (membranes) and quarterly inspections

**Area or region of operation.**

North America (Wisconsin & Vermont)

**Does your company hold any patents or the rights to any patents?** *Please identify.*

Bioeliminator – patent pending  
Biomicronizer – patent pending  
Downstream processing – patent pending  
Trademarks on biomicronizer, biosupport, bioeliminator  
and nutrient concentration & water reclamation system

**Do you manufacture equipment?**  Yes  No *Please describe.*

Own and assemble Bioeliminator and Biomicronizer, components supplied 3rd party. Integrate micronizer (FMC) and membrane technologies.

**Do you integrate equipment manufactured by others?**  Yes  No

*If you integrate, please list the names of the companies you represent.*

SWECO, FMC

**How do you answer potential customer's question about financial strength of your company?**

We are in it for the long run.

**Do you offer technical/service support?**  **Yes**  **No** *If so, what methods?*

Design, engineering and operational support

**Do you offer design services?**  **Yes**  **No** *Please describe.*

**Do you offer financing?**  **Yes**  **No** *If so, what terms?*

No, developing a relationship with regional ag bank in WI

**Are you a full stop shop?** *Design to construction to operate?*  **Yes**  **No** *Please describe.*

**Do you have preferred partners?**  **Yes**  **No**

*If so, please list and provide contact information/identify partners by name.*

SWECO, FMC

Do you have any third-party verification/research that has been done on this technology?  Yes  No

If so, please describe.

Michigan State University

Do you provide a performance guarantee?  Yes  No

If so, what are you guaranteeing? For example: up time, methane production, biogas production, parasitic load, throughput, O&M cost, percent recovery, other.

Performance guarantees. Biogas & clean water production per gallon of raw manure within 6 months. If performance not achieved, equipment is taken back and farm is reimbursed. Fixed assets stay at farms cost.

Are there any other aspects of your business that you feel should be included in this document?

Not at this time.

INITIAL TECHNOLOGY OVERVIEW

This information is to guide in the development of a more specific and detailed Technology Information Request. Please answer the following questions for each Technology or Service Provided.

What is the name of the technology or service?

Biomiconizer Bioeliminator (digester) Biosupport (digester additive) Nutrient Concentration & Water Reclamation (UF/R)

What unit process is the technology used in?

For example: initial collection/transfer manure storage, energy recovery, primary/coarse solids recovery, advanced suspended/fine solids recovery, drying, struvite production, nitrification denitrification, ammonia stripping, algae, vermi composting, membrane filtration, evaporation, other.

After the dairy's manure collection system, manure is passed through coarse solid-liquid separation (screw press). Filtrate is passed through the DO micronizing unit, exploding fine solids by pressure. The BioEliminator is a hybrid system with mixing, fixed film, mesophilic system with a short retention time of 3 to 5 days. Claims 90% VS destruction, no sludge.

Liquid effluent from the BioEliminator is sent to the NR system which consists of only membranes.

How many systems have you installed on dairy farms or other livestock operations?

1

Size of farm(s)?

650 dairy cows, scrape

Location of farm(s)?

Majestic Crossing Dairy, Sheboygan Falls, WI

What's the smallest/largest farm for your system?

500 cows (20,000gpd) up to 8,000 cows or larger

**Input material description/characteristics:**

*For example: raw manure, digestate, screened digestate, suitable non-farm feedstocks, other.*

Raw manure, coarse solids separated, no sand bedding

**Does the technology treat the full manure stream for a farm or a fraction of the stream?**

Full stream at Majestic, system can treat all manure or partial stream

**Do you consider this a mature system or ongoing farm development?**

Mature, claim that UF is unique compared to other.

**Any weather constraints?**  **Yes**  **No** *Please describe.*

Requires cold weather protection

**Any bedding constraints?**  **Yes**  **No** *Please describe.*

Manure free of bedding sand

**Is this process scalable and to what extent (top and bottom limits)?**  **Yes**  **No** *Please describe.*

Yes, the technology is modular

**Do you have a known scaling factor?**  **Yes**  **No** *Please describe.*

**Input and output of your unit/system – do you have a mass balance analysis?**  Yes  No *Please describe.*

Inputs - raw manure, off farm digester feedstocks

Outputs – biogas (70% CH<sub>4</sub>), discharge quality water (65% by volume) and a nutrient concentrate (35% by volume).

UF (20% of process flow) – phosphorus; RO (20% of process flow)

Majestic Crossing uses the clean water as freshwater (mixed with ground water). The farm is also applying for a discharge permit

**Do you consider this technology part of a larger system that you provide?**  Yes  No *Please describe.*

**Has your technology been accepted by the NRCS?**  Yes  No *Please describe.*

**Would you be willing to provide information for a technical review?**  Yes  No

**Would you be willing to respond to a Request for Quotation (RFQ) on a generic project for comparison of your technology against other technologies in the same unit process?**  Yes  No

**Are there any other facts about this technology that you feel should be included in this document?**

Not at this time.