

# Brown Grease Separation Technology

Downey Ridge Environmental Company

Ansted, WV

The patented Greasezilla system solves the grease trap waste problem for public treatment works and liquid waste haulers



# It's a \$25 billion problem





#### **Business** models

#### 1. Outright sale

- Cost of goods: \$300,000
- Customer pays \$600,000

#### 2. Revenue share

- Cost of goods: \$300,000
- Customer pays zero up front
- Tiered revenue share, up to 50–50

#### Return on investment

- EBIDTA = \$800K to \$1M
- ROI = < 1 year
- Y1 IRR = 79%
- Y5 IRR = 184%

### Greasezilla separation system

- Draws on unlimited feedstock
- Burns <5% of the fuel it generates</li>
- Uses hydronic fluid rather than steam for heat transfer

- Scalable and portable
- Easy to operate
- Requires limited maintenance
- No special permits or emissions controls required

## Greasezilla separation system

- Biofuel offtake:
  - No additional processing required prior to use
  - 0.01% moisture
  - Zero suspended solids over 50 microns
  - Very clean burning with no greenhouse gases
  - Commands a premium price on the Jacobsen commodity exchange

## Development status

- R&D and commercialization completed
- Self-funded (\$950,000)
- Offtake contracts secured
- Manufacturing and installation subcontractor secured
- Strong relationships with POTWs and waste haulers
- Initial sales of \$1.2M
- USDA grant (\$50,000) and guaranteed loan (\$250,000)

## Competing Technologies

- Require labor-intensive cleaning of heat exchangers
- Have higher maintenance and higher OPEX
- Produce offtakes that do not meet commodity trading specifications, and require disposal
- Are not easily scalable
- Are not patented

## Key customer segments

- Private and publicly owned treatment works
  - serving MSAs with populations of 300,000 to 1,000,000
  - \*with anaerobic digesters

 Larger waste haulers (\$5 million+ annual sales)

## 5 installed systems + active sales pipeline

#### Installed

- New York
- Massachusetts
- West Virginia
- U.S. Virgin Islands
- Chile

#### Leads

- Alabama
- Florida
- Georgia
- Louisiana
- Massachusetts
- Texas

- Virginia
- Washington
- Australia
- Brazil
- Colombia
- Mexico

# Downey Ridge team Management

- Ron Crosier, President
- Clint Houck, VP, Business
   Development
- Shane Zickefoose, VP,
   Manufacturing

#### **Paid Advisors**

- Brian Levine, Business
   Development
- Beverly Heath, Channel Marketing
- Robert A. Molan, IP counsel

#### Goals

- Install 3–5 systems in the next 18 months
- 2 of these would be private/public ventures
- Install 5–10 systems per year thereafter

Customer:	Some Company In FL		Market:	Jacksonville	Market Radius:	50	
Market Population			Market Capture %				
1,000,000			20.00%	A.			
Grease % in	Descripted Marks (sell)			Greasezilla Fuel			
Received Waste	Received Waste (gal)			Produced (gal)	Within the		
5.00%	8,800,000			440,000	Capacity of One Unit		
Tipping Fee (gal)	Tipping Fee Revenue			Effluent (gal)	Effluent Disposal Rate	Effluent Disposal Cost	
\$0.10	\$880,000			8,360,000	\$0.0100	\$83,600	
φο.ιο	\$000,000			0,000,000	φο.ο.ιοο	\$00,000	
Expected OPEX			Market Value	B	T-1-15	Revenue less	
Expected OPEA			of Brown Grease	Revenue from Brown Grease	Total Revenue	Disposal Costs	
Electricity	\$3,000		(gal) \$1.00	\$440,000	\$1,320,000	\$1,236,400	
Labor	\$20,000		φι.σο	ф110,000	\$1,020,000	\$1,200,700	
Supplies	\$3,000			Gross Revenue			
Misc. Utlities	\$1,000			\$1,207,400			
Wear Parts	\$2,000						
OPEX	\$29,000		Greazezilla 5 yr IRR				
Property Lease	\$60,000						
				Initial Investment	-\$600,000		
Expected CAPEX	\$600,000		Market Increase	Year 1 CF	\$1,075,400		
EBITDA	\$1,147,400		5.00%	Year 2 CF	\$1,135,770		
ROC 12%	\$72,000			Year 3 CF	\$1,199,159		
Net Cash Flow	\$1,075,400			Year 4 CF	\$1,265,716		
	]			Year 5 CF	#100E 000		
BOLin Yr 1	0.52			Tearour	\$1,335,602	\$6,011,647	
IRR (1st year only)	79%			IRR	184%		

## Key points

- Product, market & supply chain in place
- Strong customer relationships
- Zero development risk
- ROI = < 1 year</li>
- Y1 IRR = 79%
- Y5 IRR = 184%

Our Mission: to solve the costly sewer overload problem for publicly owned treatment works - and produce an advanced biofuel offtake - using a system and business models that together offer exceptional ROI

### From FOG to fuel









