DEDICATED TO THE LIQUID WASTE INDUSTRY November 2012 www.pumper.com

Grease Patrol For Slovenia's BIOPLUS, customer satisfaction requires maintaining grease traps to limit emergency calls

Page 26

. . . .

Brownie's Wastewater Solutions seeks recycling uses for everything they pump

Findin

Page 54



MAL2150 starting at: \$95,998

There's a lot we can say about how well Satellite tanks work on a Hino chassis

Instead, we'll leave the talking to these two awards from J.D. Power & Associates

Highest in Customer Satisfaction among Conventional Medium Duty Trucks

Warranty

All Hino trucks come with a 5 year / 250,000 mile warranty and 24/7 roadside assistance





4X years in a row

"Highest in Customer Satisfaction among Conventional Medium Duty Engines"

Contact

Visit satelliteindustries.com or call 800.328.3332 for more information

Masport

"Quality Vacuum Pumps & Components"



Fast and Convenient

- Quick and Easy to Install
- Fully Assembled
- Includes: Scrubber, Gearbox, Inlet Filter, Base, Pump, Relief Valves, and Gauge



Clockwise & counter-clockwise rotations available. Please specify on your order.

For more information call 1(800)228-4510

Visit us online www.masportpump.com

© 2012 Masport Incorporated All Rights Reserved



tankheads

4 Pumper • November 2012

1-800-223-3083



Istom Built...Driven by You 1-800-263-4508

T

YOUR SALES & SERVICE EXPERTS





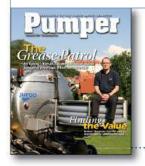
314 Lake Ave. N., Hamilton, ON L8E 3A2 Direct: 1-905-578-1000 Fax: 1-905-561-9176

Email: sales@transwaysystems.com

www.transwaysystems.com

IN THIS ISSUE November 2012

ARTICLES



26 The Grease Patrol - Ken Wysocky

For Slovenian grease trap specialist BIOPLUS, customer satisfaction requires carefully maintaining disposal systems to limit costly and inconvenient emergency calls. ON THE COVER: Owner Mihael Habicht is shown with a MAN service truck outfitted with a Jurop PVT400 pump with beautiful European countryside in the background. (Photo by Janez Misson)

12 **Reading Between the Lines:** Let Your Voice Be Heard

The Pumper Survey will show where the liquid waste industry stands on service diversification, human resources trends and building the bottom line. - .lim Kneiszel

16

Building the Business: Differentiate or Die

Saturate the market with your company's memorable unique selling proposition and watch the profits roll in. - David Frey

22

Rules & Regs: Many Florida Counties Opt Out of Septic Inspection Program - Doug Day and Scottie Dayton

34

Pumper & Cleaner Expo: Get Ready for Indy

The industry's biggest show will return to the Hoosier State in 2013. - Luke Laggis

38

Product Roundup: Flow Control

Dewatering units, containment systems, additives and portable vacuums keep grease under control and drain lines open. - Ed Wodalski

54

Finding the Value

It's not enough for Brownie's Wastewater Solutions to collect multiple waste streams for customers. They want to identify a recycling use for everything they pump. - Scottie Dayton

62

Pumper Interview: Take a Stand Against Flushing Pharmaceuticals

Pumpers can play a critical consumer education role in the battle to keep trace amounts of prescription drugs out of the waste stream - Ken Wysocky

66

Overheard Online: Time to Hire?

A poster would like to add a service technician. Industry veterans weigh in with the pros and cons of bringing on a new employee.

REGULAR FEATURES

70

Money Manager: Going Green and Getting Greenbacks

Sustainability isn't just a buzzword used by environmentalists. It applies to reducing your energy costs, lowering your overhead and boosting your profits. - David Steinkraus

74

NAWT News: Join the 'New' NAWT for a Pre-Expo Course

- Courtney Peterson

76

Septic System Answer Man: Digging in the Dirt

Knowledge of soil shapes and textures will help you keep customers' onsite systems working at peak efficiency. - Jim Anderson

80

Classy Truck of the Month We feature On-Site Sanitation LLC, Mount Vernon, Ohio.

82

Industry News

84 **Product News**

Product Spotlight: Proceptor PDI Grease Trap - Ken Wysocky

86 **Association News, Training & Education**

Coming in DECEMBER

SPECIAL ISSUE: **BUSINESS DIVERSIFICATION: SEWER & DRAIN MAINTENANCE**

- CONTRACTOR PROFILE: Family company in Virginia expands
- SPECIAL 2013 foldout wall calendar



www.pumper.com Published monthly by



OLEpublishing

COLE Publishing Inc. 1720 Maple Lake Dam Rd. P0 Box 220 Three Lakes, WI 54562

Copyright 2012 COLE Publishing Inc. No part may be reproduced without permission of the publisher. In U.S. or Canada call toll-free 800-257-7222. Elsewhere call 715-546-3346. Email: info@pumper.com • Website: www.pumper.com Fax: 715-546-3786

Office hours 7:30 a.m.-5:00 p.m. Central Time, Monday - Friday

SUBSCRIPTION INFORMATION: A one-year (12 issue) subscription to Pumper in the United States is free to qualified subscribers. Subscriptions to Canada or Mexico cost \$28 per year (24 issues for \$54). Subscriptions to all other foreign countries cost \$150 per year (\$290 for two years). Subscribers are guaranteed monthly delivery of the magazine. To subscribe please visit pumper.com or send company name, mailing address, phone number and check or money order (U.S. funds payable to COLE Publishing Inc.) to the address above. MasterCard, VISA and Discover are also accepted. Supply credit card information with your subscription order.

Our subscriber list is occasionally made available to carefully selected companies whose products or services may be of interest to you. Your privacy is important to us. If you prefer not to be a part of these lists, please contact Nicole at nicolel@colepublishing.com.

CLASSIFIED ADVERTISING: Submit ads online at www.pumper.com/order/ classifieds. Minimum rate of \$25 for 20 words; \$1 per each additional word. Include a photo for an additional \$125. All classified advertising must be paid in advance. DEADLINE: Classified ads must be received by the tenth of the month for insertion in the next month's edition. PHONE-IN ADS ARE NOT AC-CEPTED. Fax to 715-546-3786 only if charging to MasterCard, VISA, Discover or Amex. Include all credit card information and your phone number (with area code). Mail with check payable to COLE Publishing Inc. to the address above. CLASSIFIED ADVERTISING APPEARS NATIONWIDE AND ON THE INTER-NET. Not responsible for errors beyond first insertion.



DISPLAY ADVERTISING: Call Jim Flory or Winnie May at 800-994-7990. Publisher reserves the right to reject advertising, which in its opinion is misleading, unfair or incompatible with the character of the publication.

CIRCULATION: 2011 circulation averaged 25,185 copies per month. This figure includes

all circulation regions (nationwide) and international distribution.

REPRINTS AND BACK ISSUES: Visit www.pumper.com/order/reprints for options and pricing. To order reprints, call Jeff Lane at 800-257-7222 (715-546-3346) or email jeffl@colepublishing.com. To order back issues, call Nicole at 800-257-7222 (715-546-3346) or email nicolel@colepublishing.com.

2013 PUMPER & CLEANER **ENVIRONMENTAL EXPO INTERNATIONAL**

Education Day: February 25, 2013

Exhibits Open: February 26 - 28

Indiana Convention Center, Indianapolis www.pumpershow.com

Winnie May Jim Flory



MORO USA, INC

A NORO MADE IN A STATE

204

We've Expanded!

We're proud to announce the opening of our new warehouse facility

Call or Drop in (412) 787-8400

Mon-Fri 8:00am - 4:00pm (After hours by appointment)

Our fully stocked warehouse includes:

Industrial grade vacuum pumps

- Bolt & Go pump packages
- Pump & tank accessories
- Valves and more...



Warehouse Location 204 Parkway View Drive Pittsburgh, PA. 15205

"Our new warehouse will allow us to bring products" to our eastern customers more efficiently."

Jeff Jaillet Pittsburgh, PA Warehouse Mgr.



Jeff Jaillet

Learn more about Moro pumps,

visit us at www.morousa.com

Sales Order/ Warehouse Mgr. Pittsburgh Warehouse Facility

SALES OFFICE PITTSBURGH, PA Toll Free: (800) 383-6304 fel: (412) 787-8400 ST. LOUIS OFFICE UNION, MC Toll Free: (866) 383-6304 fel: (636) 584-8844



Mark Nixon Dave Clavenna 314-608-4679 314-608-3089 East Region Midwest Region

M030301

MORO VACUUM PUMPS Over 55 years of field

proven performance



FAN COOLED PM70T 247 cfm

FAN COOLED PM80T 350 cfm

FAN COOLED PM1001 460 cfm

WATER COOLED PM60W - 252 cfm PM80W - 417 cfm PM110W - 630 cfm

LIQUID COOLED PM200 677 cfm

LIQUID COOLED PM2600 Storm 824 cfm





27th TRUCKS INC. 27th Trucks, Inc......81

Δ ABBOTT RUBBER Abbott Rubber Co., Inc..... 18

ABERNETHY Abernethy Welding & Repair..45

ACRO Acro Trailer Company......30 AlturnaMATS, Inc.....20

MACHINERY Amazing Machinery, Inc. 39

(C) Aqua Ben Corporation22

F. Aqua-Zyme Disposal Sys...72

THE Arcan Enterprises, Inc......14

RETIC BLASTER Arctic Blasters, Inc......83 Armal, Inc.64 ARMSTRONG EQUIPMENT INC.

Armstrong Equipment9 Atlanta Rubber Atlanta Rubber & Hydraulics, Inc.....72

Badge Badger Vacuum Trucks75

BANDLOCK Bandlock Corp.....14

B BEST ENTERPRISES Best Enterprises, Inc.31

Seal-R Brenlin Company, Inc.77

SRUDON BRUDON Air Vac/Kay Intl...75



8 Pumper • November 2012

Cape Cod Biochemical Co. 36

(C) CEI - Chandler Equip., Inc..36

2012

chempace Chempace Corporation ... 16, 80

Clear Computing, Inc.....74

Comforts of Home Comforts of Home Services.. 12

CRUST BUSTERS Crust Busters/ Schmitz Bros., LLC 79

CUSCO Cusco

D DA Deal Associates, Inc......81 Ditch Witch13 DrainfieldRepair.com83

Ecological Laboratories, Inc..52 EICA Tankheads, Inc.4

Е

FLASTEE nericanMarinei Elastec/American Marine....78

wallenstein Elmira Machine/Wallenstein Vacuum Pumps68

ENVIROTUB Envirotub64

ERICKSON Erickson Tank & Pump78

SOLUTIONS F. S. Solutions.....23



ALD TREND Flo Trend Systems, Inc......32

Fruitland Tool & Mfg......18

G GapVax, Inc.....53

😤 Green Way Products Green Way Products by PolyPortables, Inc..25

Hannay Reels Hannay Reels78 **Hedstrom**

Hedstrom Plastics......81

ï Imperial Industries, Inc.73

K KeeVac KeeVac Industries, Inc......87 Keith Huber, Inc......32

Kentucky Kentucky Tank, Inc.68 Key Commercial Corp.78

ι LANE'S VACUUM TANK, INC. Lane's Vacuum Tank, Inc....85

(IIIY)-Lely Manufacturing, Inc.24

Lenzyme Lenzyme, Inc.4 LMT, Inc.....76 Longhorn Longhorn Tank & Trailer20

M **Hanh**

Marsh Industrial64 Masport Masport, Inc......3

EXPLORER McKee Technologies, Inc./ Explorer Trailers/60 Mid-Atlantic Waste Sys......86

Mid-State Tank Co., Inc.83

Milwaukee Rubber Prod.4

m moro Moro USA, Inc.....7

N NVE National Vacuum Equipment 15

NAWT, Inc.....75, 87, 97

n One Biotechnology30

P People's United Equipment Finance Corp......20

P

pikrite

PolyJohn Enterprises......99

POLYLOK. Polylok/Zabel..... 98

POLYPORTABLES PolyPortables, Inc......55

PL Pressure Lift Corporation....79

///PRESVAC Presvac Systems, Ltd...... 100

propress vactrack Progress Vactruck 10-11

R Sumit Ritam Technologies LP......46

Robinson Septic Service Inc.) Robinson Septic Service85

Rolo Solution: RotoSolutions, Inc.63

Rush Rush Refuse Systems57

SAFE TRUESH Safe-T-Fresh.....61 Sanitarios v Quimicos de Mexico66

S

(Satellite) Satellite Industries Inc.2, 41

Septic Services, Inc. Septic Services, Inc.....24

THE SLIDE IN

Specialty B Specialty B Sales.....71 Superior Gearbox Co......29

SURCO Surco Products77

Sweet Septic Systems 59

т T&T Tools, Inc.....69

Junior . T.S.F. Company, Inc......33 **TankTec**

TankTec43

Pakes Three Lakes Truck & Equip.37

TS Transport Truck Sales, Inc., 19

Transway Systems, Inc......5 TREMCAR U.S.A. INC.

Tremcar, Inc.....62

Tri-State Tank69

TSI TSI Tank Services, Inc......97

A TUF TITE Tuf-Tite, Inc.....35

VAC-CON Vac-Con, Inc......65

VAANTPILY Vacutrux Limited

VARCO VAR Co.....67

W VAL Wee Engineer, Inc.14 West-Mark, Inc.79

Conde Westmoor Ltd./Conde......47

Classifieds......90 Marketplace......88

REGIONAL ADVERTISERS

Midwest Supplement

(after page 74)

1 dvance

Advance Pump & Equip.....1 Patricated Marengo Fabricated Steel 3 Mid-State Intl'I. Trucks

of WI1 PAT'S PUMP + BLOWER

Pat's Pump & Blower.....1 TA BORN MELLO R.A. Ross & Associates NE..2

-RIDER-Rider Agri Sales & Svcs......4

T-Line Equipment, Inc.

T-Line Equipment, Inc.....4 V&H Inc.2

Eastern Supplement

(after page 74)

Advance Pump & Equip......3

Crescent Tank Mfg......6

Manchester Hose & Coupling. 6

Marengo Fabricated Steel 5

Pat's Pump & Blower6

R.A. Ross & Associates NE..4

V&H Inc.1

Vacuum Sales, Inc.....7

Scan the code with your smartphone

of WI4

CRESCENT TANK MEG.

HOSE & COUPLING

Mid-State Intl'I. Trucks

CALA BORN NE

Harden and

PAT'S PUMP+

VSE

..60

1 dvance

(A1)

COMPROMISE

Masport HXL400WV

Wittig RFL100

I.

2260

Like us on

Facebook

RCF500

Sutorbilt

107 CHALLENG

ondo

At Armstrong Equipment, we believe life and business require certain compromises, but not on those things on which your business and family depend. A beautiful, new and shiny vacuum truck with a burned out pump is nothing more than uncomfortable transportation at four miles per gallon.

Your customers depend on you! Your employees depend on you! Your family depends on you!

We think you should be able to depend on **us!** That is why we sell the most dependable vacuum pumps, parts, valves and tank components available. When it comes to quality and reliability in the tools that make your business successful, there should be:

"No Compromise."

We proudly stock Masport, Jurop, NVE, Condé, Fruitland and G-D Wittig vacuum pumps, Sutorbilt blowers, Garnet Instruments SeeLevel gauges, Clearflow Heavy Duty valves and most other vacuum truck components and accessories. We can also provide replacement pumps and repair kits for most major brands. For more information call us toll free at **800-699-7557**.

ARMSTRONG

EQUIPMENT

800-699-7557 11200 Greenstone Ave. • Santa Fe Springs, CA 90670 562-944-0404 • Fax: 562-944-3636 www.vacpump.com

Hablamos Español

111 (G) 100

INC.

ease & Oilfiel Vacuum Serv I, Septic. Rest

Code & Non Code 0 Front Lift / Rear Opening Straight Tanks •



IN STOCK **ONTHE LOT!**

Septic Service - Single Axle



D.O.T. Code Oilfield Pumper

www./ Contact your Master Distributor for com



Steel Septic





Restroom Service



Aluminum Slide In



Best

Hoist & Door

Septic Service - Tri Axle

Combo Vacuum

IN STOCK ONTHE LOT!

Aluminum & Stainless Trailers



plete specifications, availability and price.

IN STOCK ONTHE LOT! Painted Stainless Tri Axle Lift





888-428-6422 Steve Nelson snelson@tanktec.biz www.tanktec.biz



877-582-2626 Rob Matthew / Russ Crane Calgary, AB, Canada sales@canamequipment.com

Aluminum

0

Stainless Steel

0

Carbon Steel



TRI STATE TANK 888-281-9965 Phil Hodes phodes@tristatetank.com www.tristatetank.com



866-789-9440 Kevin Keegan kevin@keevac.com www.keevac.com







Let Your Voice Be Heard

The online *Pumper* Survey will show where the liquid waste industry stands on service diversification, human resource trends and building the bottom line

By Jim Kneiszel

ust about four years ago, shortly after the collapse of the U.S. economy and the contentious fall elections of 2008, we conducted a survey of *Pumper* readers asking 10 questions aimed at providing a valuable snapshot of business conditions in the liquid waste industry.

It's time to take the pulse of the pumping industry again. A new 2012 Pumper Survey is found online at www.pumper.com/2012survey.

A seesaw economy, vast technology advances and major changes in the employment picture since the last survey have drastically changed the way pumpers operate their businesses. Gone are the days when it was next to impossible to find workers to add to the payroll. The construction industry



Jim Kneiszel

Contact Jim with your comments, questions and opinions at editor@pumper.com.

Please go to **www.pumper.com/2012survey** and take a few minutes to fill out the survey form. We will continue to tally the answers through Dec. 15.

has ground to a standstill in some regions, and switched from red-hot residential development to commercial work in others.

Both what you can charge for services and your costs of doing business have changed as well. And your ability to obtain capital for equipment and business expansion has changed, too. Just before the economic collapse, it seemed like banks were tripping over each other to loan you money. Now they might be pinching nickels together like your frugal old Uncle Ed.

TWEAKING THE SURVEY

And the menu of services you offer today might be far different than it was in 2008. In addition to pumping, residential septic system installation was a popular offering in the mid-2000s. So was portable sanitation for the construction market. Since the downturn started, I've heard of pumpers dropping construction-related portable sanitation service, and those who pursued onsite work during the housing boom have found an emerging market for system inspections and maintenance.

A large number of the questions in the 2012 study mirror those in the 2008 study, so we can compare industry changes over that period. In the online survey, we ask about your average costs for disposal, average price for a pump-out, and add-on charges for specific service offerings. We ask how many gallons you pump on a daily basis and how you most often dispose of your septage.

On the employee side, we want to know whether you pay workers by the hour or through salary, and ask you to elaborate on benefit packages you offer. But we've added a few wrinkles to the human resources questions. We want to know about your wage range for workers, whether or not you offer cellphones to your crew, and whether you plan to hire a new employee in 2013.

WE NEED YOU!

We believe data collected from the 2012 survey, compared to how septic service providers answered four years ago, will give valuable insights for small business planning moving forward. But simply formulating the questions and publishing them online doesn't make for a successful survey. We need the pumping community to make the survey results meaningful.

Please go to www.pumper.com/2012survey and take a few minutes to fill out the survey form. We will continue to tally the answers through Dec. 15 and publish the results and an analysis of industry trends in the March issue of *Pumper* and online.

Your participation is essential for a quality survey. Thanks in advance for your help. \blacksquare

EVERY JOBSITE BEGINS AND ENDS WITH THE FX50.

FX50

F

The new Ditch Witch^{*} FX50 vacuum excavator increases your productivity from start to finish. With its outstanding suction and water pressure, the 49-hp (36.5 kW) FX50 is made for every phase of your installation project, from damage prevention to cleanup of all types of spills, HDD fluids, and jobsite debris. Optional reverse flow makes it easy to offload spoils, and standard hydraulic tank doors simplify operation. Plus, numerous options allow you to customize your FX50 for municipal projects such as exercising valves. See your dealer for more information, or visit ditchwitch.com.



2.9% FINANCING FOR 48 MONTHS on all Ditch Witch vacs.

See ditchwitch.com/financing for details. Exp. 12/31/12.

FROM THE COMPANY THAT LAUNCHED THE INDUSTRY: COMPACT UTILITY | TRENCHERS | HDD | ELECTRONICS

Wee Engineer with IMAGINATION Call us for a quote

Let us put this tank on your truck-OR-we will find a good used truck for you-OR-we will get a new truck-OR-we will deliver this tank on a trailer. It is ready for you NOW. We can customize it however you specify to streamline your daily work. Price: \$13,990 includes secondary, wired, white paint, and valves.



Best Heavy-Duty Portable Toilet Trailers on the Market



24 ft....^{\$}8,800 28 ft....^{\$}9,100 34 ft....^{\$}9,990

Our customers are pleased with the time they save loading and unloading toilets.

Join us on Facebook!

SPRING MOUNTS

HEATED COLLARS Preventing your valves from freezing will help your profits during the winter months. 1.5-2".....\$110 3".....\$165 4"....\$198 6"...\$297 Installation kit and 110 volt

heater kit available

PO Box 39, Dayton, IN 47941 Toll-Free: 877.296.2555

> Fax: 765.296.3027 www.wee-engineer.com

Phone: 765.296.2027

Irrigation fittings are for irrigating – NOT vacuum. How many dollars are you spending **SUCKING AIR**? Industry-proven, quality vacuum couplings from Bandlock will put money into your pockets.





The First Choice for Pumpers to Restore and Maintain Drainfields

Backed By Science 🔳 Proven with Experience 🔳 Many Satisfied Homeowners

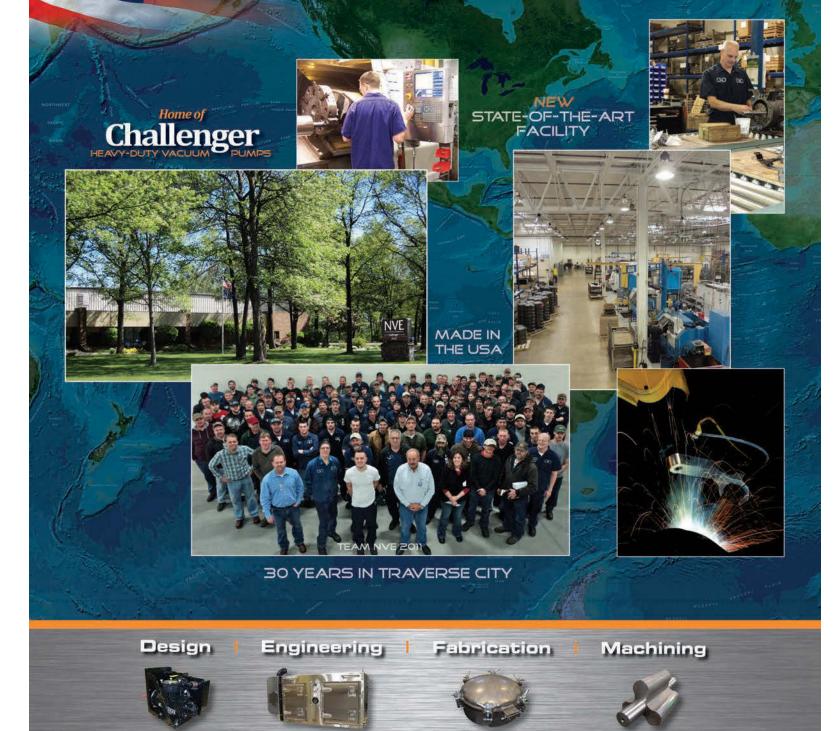
Septic-Scrub[™] is a superior product for the maintenance and restoration of septic system drainfields. Customers appreciate that it is environmentally safe, contains no organic chemicals and does not produce any toxic by-products. Most importantly, Septic-Scrub works It breaks down sulfide buildup in the biomat and soil to allow for better water absorption. Learn more about Septic-Scrub at www.arcan.com



For information on increasing sales and providing a valuable service to your customers, call Arcan Enterprises at 888-35ARCAN (352-7226)



A Partnership for Success



800.253.5500 | natvac.com



David is president of Marketing Best Practices Inc., a Houston-based small business marketing consulting firm, and senior editor of the Marketing Best Practices Newsletter. He can be reached through his website, www. marketingbestpractices.com.

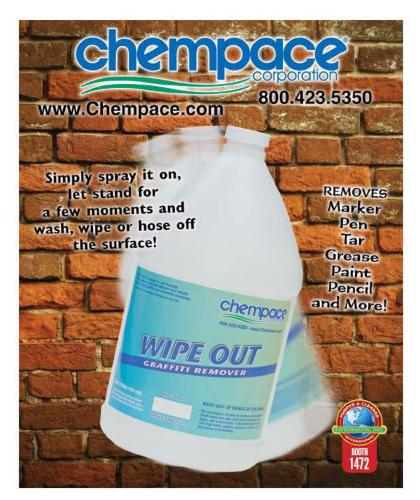
Differentiate or Die

Saturate the market with your company's memorable unique selling proposition and watch the profits roll in

By David Frey

vis Car Rental proclaimed: "We're number two. We try harder." Federal Express stated: "When it absolutely, positively has to be there." And Domino's Pizza promised: "Fresh, hot pizza in 30 minutes or less." What do all three of these slogans have in common? They are powerful statements of uniqueness that helped to propel these companies to success.

Avis knew Hertz was so much bigger that it couldn't compete head-on so they positioned themselves as the upstart company that worked harder for the customer. Federal Express based its slogan on a promise of delivery reliability. Dominos based its slogan on the knowledge that most pizza eaters don't care how much stuff is on it, but that the product is hot, fresh and delivered fast.



Each slogan is its respective company's *unique selling proposition*, or USP. A USP is something that differentiates you from your competitors. It's what makes people choose to do business with you over all others. It states your distinct advantage. The origin of USP comes from Rosser Reeves, an advertising agency chairman in the 1960s and author of the book *Reality in Advertising*, which introduced the concept.

One of the deadliest mistakes small businesses make is not being unique. Now more than ever you must differentiate your business. There is an explosion of choices for consumers, and during slow times, the same number of small businesses will compete for a diminishing number of customers.

GET SPECIFIC

To be successful in small business, you don't have to be the best. You just have to be unique. Incorporating your USP into everything you do will differentiate you, distinguish you and give you an advantage over everyone in your market. "Me too" businesses rarely survive. They usually end up in price wars because they don't have anything unique about them to establish value in the minds of their customers. And unless they have a significant cost advantage over competitors, they lose.

The more clearly you announce your USP, the more often customers choose you over your competition. You must use your USP to dominate the local market. When a consumer thinks of buying a product in your industry, your name must be the first one that pops into their mind.

For example, Dominos made a very bold guarantee that if they didn't deliver your pizza in 30 minutes, it would be free. Dominos put their USP into action. How many small businesses do you hear boasting, "The Best Selection in Town" or "Service with a Smile"? These phrases are worn out, tired renditions of a "me too" business.

Rather, be specific with your USP. The Domino's promise was specific and measurable. "Buy it today and install it tonight," is also specific and measurable.

GET IT RIGHT

You shouldn't rush the decision on your USP. You will spend thousands of dollars on advertising and promoting your USP. Once you've made your impression and then decide to change it, you confuse your customer and it will cost you even more to start over with a different USP. If your USP is a promise or guarantee, make sure you can fulfill your USP promise.

How do you pick a USP? First identify needs that are going unfulfilled in either your industry or your local market. These are called *performance gaps*.

Many businesses that base their USP on industry performance gaps are successful. Here are some examples in different small business industries:

Auto Repair

<u>Performance Gap</u>: Auto repair shops have a reputation of being dishonest. <u>Potential USP</u>: "If it ain't broke, we won't fix it!"

Dental

<u>Performance Gap</u>: No one likes to go to the dentist because it's a painful experience.

<u>Potential USP</u>: "Sedation dentistry: The safe, pain-free way to healthy teeth."

Real Estate

<u>Performance Gap</u>: People are wary of letting real estate agents sell their homes because they don't believe they will try to sell them fast enough.

<u>Potential USP</u>: "Our 20-point power marketing plan gets your house sold in 30 days or less."

Identify needs that are going unfulfilled in either your industry or your local market. These are called performance gaps. Many businesses that base their USP on industry performance gaps are successful.

GET IT FIRST

Although a USP is a statement of your uniqueness, it doesn't always have to be something that is only unique to you ... if you proclaim it first. For instance, if you were a furniture retailer and you announced your USP as, "Buy today, we'll deliver it tonight." Most competitors can do that too, but because you were the first to proclaim it, it is yours exclusively.

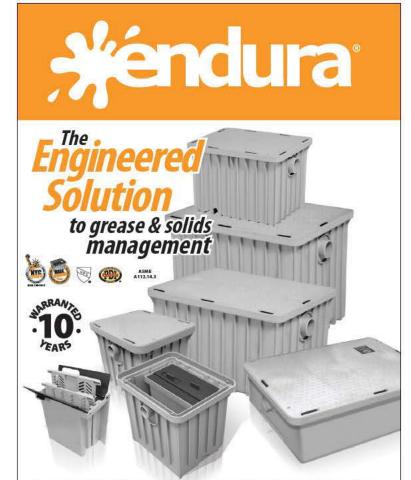
This is called *preemptive marketing*. You can preempt your competitors if you take a strong benefit – whether or not it's unique – and put your stamp on it first. All others who come after you will just be strengthening an advantage you've already placed in the minds of potential customers.

Your USP should have promises, guarantees, policies and procedures, employee evaluations and other reinforcing processes to make it come alive.

Once you've developed your USP, integrate it into everything you do. Your USP should be found somewhere in your headlines and body copy marketing materials, direct mail and phone book advertising. Repeat it clearly and consistently. Include it in your sales presentation, put it on the walls of your business and print it on your business card. You can't overdo or wear out your USP.

BE MEMORABLE

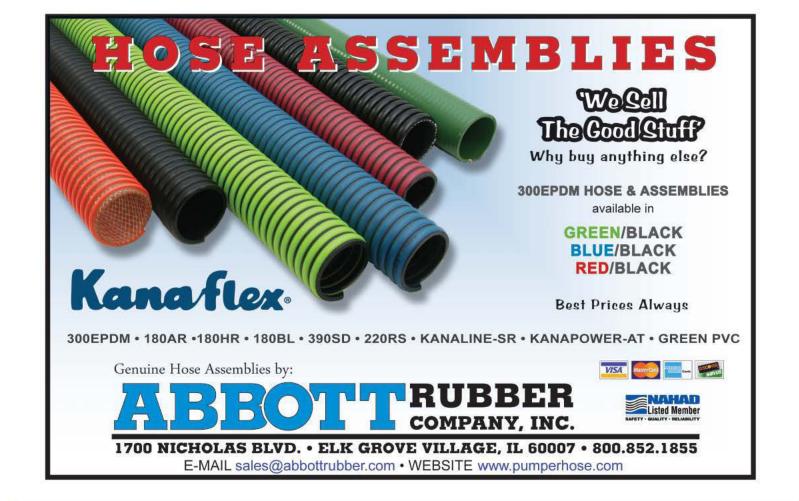
The nation's most successful furniture dealer is based here in Houston. You can't turn on a radio or television without hearing the furniture store's USP, "Saves You Money!" It's everywhere. If you stopped someone on the street and said two words, "Gallery Furniture," and asked them to finish the sentence, nine out of 10 people would say, "Saves You Money!" That's an effective USP. ■



Providing the grease management solution for today's plumbing and food service professionals

- Patented latches make pumper access fast and simple
- · Compact, durable, and user-friendly
- Withstands continuous discharge at 104°C (220°F)
- Lightweight and easy to handle during installation
- Supports 440 pounds of pedestrian and light duty traffic
- Flexibility of installation can be installed in-floor, on-floor, or semi-recessed.
- Injection molded in engineered thermoplastics, Endura will not corrode, chip, or peel, even under the most severe applications.





FRUITLAND VACUUM PUMPS



Eliminate your problems and your competition with one easy package.

All you do is bolt it on, hook it up and go to work. It's that easy!

Available for RCF 500 or RCF 370 packages in diesel, angle gear box or hydraulic drive.

Fruitland Tool & Manufacturing

"Committed to Quality, Reliability and Guaranteed Performance"

Contact us today:

1.800.663.9003 Visit us at www.fruitland-mfg.com for more info.

TRANSPORT TRUCK SALES, INC. Ask for Scott or Frank – 888-395-7551 After hours call Scott at 816-590-4076



What Does It Take To Be A "Qualified Chassis"?



Pass a D.O.T. certified inspection!

Pass the warranty inspection!

What Does All This Do For You?

 Nationwide drive train warranty for
 2 years/ 200K miles! (restrictions apply)

 A tough truck that is ready to work as hard as you do!

YOUR TRADES ARE WELCOME!

Searching For A Brand New Chassis? We Have Them In Stock!

TransportTruck.com



2007 Peterbilt 385, C-13 Cat 430 HP, 13 spd, jakes, AC, new 3360 gallon steel vac tank, new liquid cooled HXL-400 Masport vac pump. Call For Pricing! 2-YEAR 200,000 MILE DRIVE TRAIN WARRANTY



2005 International 4300, DT-466E 230 HP,Allison Auto, AC, 33# GVW, low miles, **new** 2300 gallon steel vac tank, **new** Jurop PN-84 vac pump. Call For Pricing! 2-YEAR 100,000 MILE DRIVE TRAIN WARRANTY



2005 Peterbilt 385, Cummins 370HP jakes, 10 spd,AC, cruise, full locking rears, **new** 3360 gallon steel vac tank, **new** liquid cooled Masport 400 HXL vac pump. Call For Pricing!

2-YEAR 200,000 MILE DRIVE TRAIN WARRANTY



2004 Freightliner M-2, Cat 210 HP, AUTO, AC, low miles, NON CDL, new 1870 gallon steel vac tank, new Jurop PN-84 vac pump. Call For Pricing! 2-YEAR 100.000 MILE DRIVE TRAIN WARRANTY



2005 International 4400, DT-466E 230HP, 6 spd, AC, 33# GVW, very low miles 78K, **new** 2300 gallon steel vac tank, **new** Jurop R-260 vac pump. Call For Pricing!

2-YEAR 100,000 MILE DRIVE TRAIN WARRANTY



Multiple New 5460 gallon vac trailers, IN STOCK, inner lining, full cat walks, spring susp. or air ride susp., full hose trays, 50# lb susp., 1 IR24.5 tires, NVE, Fruitland and Jurop pumps IN STOCK as well!

Delivery Available Anywhere in the Lower 48!

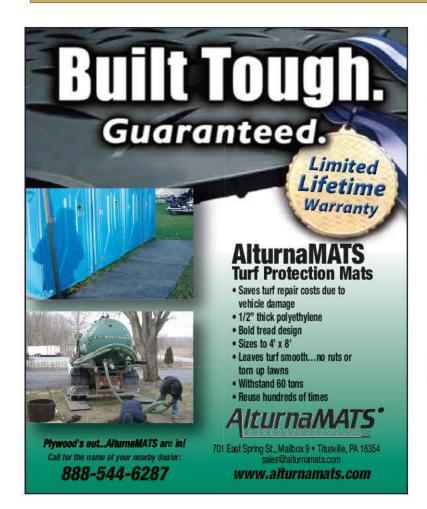
www.longhorntank.com

Truck Mounted Tanks for Septic, PortableToilets, Grease Traps, Etc.



Aluminum, Stainless, and Steel VacuumTrailers in any Size

Call or Email Us For a Quote Today Longhorn Tank Company 800-422-9840 sales@longhorntank.com PO Box 1147 Gravette, AR 72736 Fax 479-787-6935



People's United Equipment Finance Corp.



- Industry Finance Specialists
- Industrial and Commercial Equipment Financing

Acquisitions Financing

Manufacturer Programs Available

A Premier Commercial Finance Company that specializes in financing & leasing equipment in the Waste & Environmental Industries

SERVING THE NEEDS OF The waste industry For over 20 years

PLEASE CONTACT YOUR LOCAL REPRESENTATIVE

Perry Siler	JD Magness	Robert "Bob" Marino	Jay Felizzi
Cell: 231-745-3495	Cell: 804-694-6183	Cell: 215-360-1776	Cell: 704-576-9210
Area: MN, WI, IL, IN,	Area: Eastern VA,	Area: PA, NY, CT, RI, MA, NH,	Area: Northern GA,
MI, OH, IA, ND, SD	MD, DC, NJ, DE	VT, ME	Western VA, KY, TN, WV
John Moore	Kevin P	arry Gerald Hargra	ve Bob Pritchett
Cell: 720-315-5700	Cell: 704-650)-2635 Cell: 713-898-053	1 Cell: 205-999-4214
Area: CA, NV, CO, ID, N	AT, Area: NC, W	V, SC, Area: TX, OK, LA, N	IM Area: GA, FL, AL,
WY, UT, AZ, NM, NE, H	(S Western VA, Ins	ide Sales	MS, AR

Big Features. small price tag.



DURABLE. STYLISH. AFFORDABLE.

The Five Peaks line of portable restrooms strikes that perfect balance - offering products with extra features that would have you seeing dollar signs elsewhere. Extras such as shelves, hooks, oversized mirrors, hover handles, and gender signs. All included. All at no extra charge.

Our portable restrooms aren't just versatile – they're tough. We build products that are always low maintenance and reliable enough for your toughest jobs.

Five Peaks offers a full line of portable sanitation products that provide the best possible solutions to meet your needs. It's time for you to try the most impressive restrooms in the industry and stop paying out-of-this-world prices.

To place an order or for more information just give us a call at **866.293.1502** or you can visit our website at **www.fivepeaks.net**.



1790 Sun Dolphin Dr., Muskegon, MI 49444 231.830.8099 | info@fivepeaks.net Many Florida Counties Opt Out of Septic Inspection Program

By Doug Day and Scottie Dayton

Ten of 19 counties with first-magnitude springs have voted to opt out of having septic tank inspection programs, according to the state Department of Health. A measure in 2011 allowed the 19 counties to opt out with a supermajority vote.

Michigan

The Senate approved a bill to ease restrictions on development of property near the Great Lakes sand dunes. Current law requires people who want to build or install septic systems to get a permit and prove the construction will not harm the environment. The proposal from Sen. Arlan Meekhof would shift the burden to the state Department of Environmental Quality. The proposal would affect 70,000 acres of protected sand dunes in Michigan. The House had not yet addressed the bill.

Maine

In a demonstration for local officials, dogs were used to track down septic system failures, sewage leaks and illegal connections to storm sewers in Maine and New Hampshire. The dogs are from Environmental Canine Services in Vermontville, Mich.

The state Division of Environmental Health approved the Busse system for treating residential wastewater. The system, 90 percent smaller than typical drainfields, organically breaks down 100 percent of the waste and installs above ground in hours. It uses 0.4 percent micron filtration and aerobic and anaerobic treatment. Effluent, which exceeds recommended clean water standards, is recycled in the house, reducing freshwater demand by 30 percent. Busse has more than 600 such systems in 15 countries worldwide. An average system costs \$21,600.



Minnesota

As of August, Douglas County instituted a new septic ordinance that includes additional permit requirements and fee adjustments. The ruling affects standard and alternative onsite systems, holding tanks and privies, and restaurant/bar/hotel systems. It also requires soil verification for all new systems. The ordinance is at www.co.douglas.mn.us.

Pennsylvania

Gov. Tom Corbett issued an executive order requiring the Department of Environmental Protection to assess how to make timely permitting decisions. The department issues permits covering municipal plans for individual onsite systems. The agency also issues permits under the NPDES program after permitting municipal plans that allow stream discharge for sites where unsuitable soils rule out drainfields.

Rhode Island

Implementation of amendments to state rules for onsite systems in salt pond areas were postponed to November 2014. They would require property owners to install denitrification technology when building additions smaller than 600 square feet. Other changes extend the deadline for replacing nonfailing cesspools in areas where sewer extension projects are planned to 2020. The deadline for replacing non-failing cesspools near the coastline or other tidal features remains Jan. 1, 2014.

Washington

Two years after the Whatcom County Health Department allowed homeowners to inspect their onsite systems, officials say the evaluation submittal rate dropped from 66 percent to 22 percent. Therefore, officials proposed adding \$25 to property taxes for 28,000 homes in the county with onsite systems. The new tax would replace a \$35 fee for submitting inspection reports and a three-cent-per-gallon septage tax. Pumpers would pay the tax, which would add about \$30 to the cost of pump-outs.

Wyoming

According to officials with Sheridan County and the Sheridan County Conservation District, more than half the septic systems within 300 feet of Big and Little Goose Creek are not permitted. County Public Works director Rod Liesinger drafted a resolution waiving the \$250 permit fee to encourage homeowners to call the department to locate their systems. The state Department of Environmental Quality considers the creeks contaminated with fecal coliform.

Rules and Regs is a monthly feature in *Pumper*. We welcome information about state or local regulations of potential broad interest to onsite contractors. Send ideas to editor@pumper.com.

WE DON'T FIX PROBLEMS. WE ELIMINATE THEN

Be Unstoppable

Solutions



Solution

Bill





Machines break, parts wear down. And it always happens at the worst possible time. Don't gamble on a quick fix that only patches the problem, it will end up costing you more money and opportunities in the long run. Our team of experts will repair or maintain your airmoving or waterblasting equipment (all makes–all models) quickly to keep you going strong for the long haul.

Visit www.fssolutionsgroup.com or call 1-800-822-8785 to find the FS Solutions Service Center nearest you.







SUPERTURBO TUBES THIS ISN'T YOUR ORDINARY BLUE

NOW TURBO TUBE'S POWERFUL SOLUTION IS EASIER TO DELIVER WHILE SAVING YOU MONEY...

The NEW ULTRA concentrated Super Turbo Tube makes handling the toughest odors as EASY as 1-2-3.

In just seconds, the Super Turbo Tube's quick and easy to handle NO DRIP dispensing bottle delivers the MOST CONCENTRATED liquid deodorizer on the market.

Save Time... Save Space... SAVE MONEY!

IT'S YOUR NEW EXTREME BLUE...

See for yourself. Try a free sample. Call Cindy or your PolyPortables division manager at **800-241-7951**.

PORTABLE TOILETS • HANDWASH STATIONS • DEODORIZERS • CLEANERS • TRUCKS 99 Crafton Drive, Dahlonega, GA 30533 USA • Phone (800) 241-7951 or (706) 864-3776 • Fax (706) 864-8111 • www.polyportables.com

All Green Way Products' deodorizers, cleaners and air fresheners are high-performance products developed and manufactured in our facilities in Dahlonega, Georgia specifically for portable restroom operators. They are all environmentally safe.



Grease Patrol

For Slovenian grease trap specialist BIOPLUS, customer satisfaction requires carefully maintaining disposal systems to limit costly and inconvenient emergency calls By Ken Wysocky



Bernard Kozuh and Klemen Hribar pump out an onsite system in Slovania. (Photos by Janez Misson)

The Republic of Slovenia is thousands of miles from the United States. But aside from the distance, there's not much separating BIOPLUS d.d.o., a grease trap and drain line cleaner in the south central European country, from its counterparts in the United States.

Led by owner Mihael Habicht, the company follows a formula familiar to successful U.S. pumpers: Use advanced technology to boost productivity, reduce the cost to customers and enhance client satisfaction; promote preventive maintenance contracts to ensure a steady income and minimize expensive, disruptive emergency calls; diversify service offerings to capitalize on an existing customer base; and provide top-notch customer service.

Habicht established the company in 1997 in Skofja Loka, a city near the capital of Ljubljana. At the time, the business focused only on bioremediation, a process that uses microorganisms to naturally remove unwanted organic material from grease traps and drain lines, which in turn reduces clogs and backups.

STEADY AS SHE GROWS

Growth occurred steadily. Today, the company serves about 400 clients in a country that's a little smaller than New Jersey and with a population of about 2 million. Over the years,

BIOPLUS d.d.o., Skofja Loka, Slovenia

ESTABLISHED: 1997 OWNER: Mihael Habicht EMPLOYEES: 10 SERVICES: Bioremediation and cleaning of drain lines and grease traps

BIOPLUS also diversified by expanding into pumping grease traps and cleaning drain lines. As such, employment increased to 10 workers and the company now owns a small fleet of vehicles and equipment.

About 70 percent of the company's sales volume comes from maintenance contracts for bioremediation treatment. Grease trap pumping and drain line cleaning accounts for most of the remaining 30 percent.

"One of our main challenges is how to get a business base that is large enough to develop the company profitably," says Habicht, who travels to



Hiring Right

the U.S. to attend the Pumper & Cleaner Environmental Expo. "We have to diversify if we want to be successful because otherwise there's not enough business volume (in such a small country)."

So far, the formula is working. In 2011, BIOPLUS increased its customer base by 20 percent, which Habicht attributes to ever-increasing brand recognition and customers' business expansion. "Our customers are growing, and we grow with them," he says. "For instance, if our customer opens a new supermarket, they call us to inspect the drain lines and to set up our bioremediation system."

We soon realized customers wanted us to take care of the whole plumbing system. At first we relied on other pumping companies. But when they did not perform to our expectations, we decided to invest in trucks, then cable machines and waterjetters. - Mihael Habicht

SMALL SERVICE TRUCKS

Habicht says one major difference between his business and U.S. operators is a preference for smaller vehicles, which are more maneuverable on narrow European streets and get better mileage.

To clean grease traps, BIOPLUS uses a 2004 Fiat Iveco vacuum truck with a steel 550-gallon waste/150-gallon freshwater tank, made by Atrik d.d.o. featuring a Jurop pump; and a 2011 vacuum truck, made by MAN Truck and Bus AG and outfitted by Jurop with a 2,100-gallon waste/530-gallon freshwater stainless steel tank and Jurop pump.

The company also owns four small service vehicles that carry draincleaning equipment: three 2009 Renault Kangoos and a 2011 Renault Traffic. In addition, it relies on an Aquajet skid-mounted waterjetter, made by Rioned UK Ltd. and equipped with a Honda pump (150 psi at 15 gpm); several large Rioned cable drain-cleaning machines and one hand-held unit; six portable jetters (140 psi at 120 gpm), manufactured by Alfred Karcher GmbH & Co. KG; and two pipeline-inspection cameras, one made by Rioned and the other by CTU Camera Technik Ujvari.

"In the beginning, when we embraced bioremediation technology, we didn't have an exact notion about how the business would develop," Habicht says of his company's evolution. "But we soon realized customers wanted

Difficulty finding qualified employees with a good work ethic is not a challenge limited to small businesses in America. Even in Slovenia, which suffers from high unemployment, Mihael Habicht, the owner of BIOPLUS d.d.o., a bioremediation and grease trap/drain line cleaning company, says he struggles to find good employees.

"With about an 11 percent unemployment rate, finding workers is not an issue," Habicht says. "The issue is finding employees with a high work ethic. We are very slow in recruiting employees ... it takes a lot of time to hire someone. We cannot afford to make mistakes because it takes several months to fully train someone."

To find good workers, Habicht seeks referrals from his employees. "I consider them entitled to have a say in the recruitment process, as their work in the field requires mutual help and advice," he says. "So it's our primary interest to find a colleague who will be a team player.

Because finding good, qualified employees is difficult, it's paramount to retain them. So Habicht's other challenge is how to reward employees who do good work. In Slovenia, laws already raise the reward bar by mandating things such as 30 days of vacation for employees. Also, it's partly a law and partly a Slovenian tradition to give a Christmas bonus equal to one month's salary.

Habicht goes further to reward key employees, supporting a supplemental retirement plan, something only 30 percent of companies do.

"On top of that, we also provide incentive pay and flex time," Habicht continues. "We cannot forget that this job is both physically and mentally trying. It can be stressful because each day, the finishing time is uncertain. We want them to have good family time."



The BIOPLUS crew includes (from left) Bernard Kozuh, Klemen Hribar, Neza Rihar, Mihael Habicht, Rok Kusar, Lado Fojkar and Andrej Kusar.

us to take care of the whole plumbing system. At first we relied on other pumping companies. But when they did not perform to our expectations, we decided to invest in trucks, then cable machines and waterjetters.

"Our decision proved to be successful because now we can meet customers' demands – respond quicker and do pumping jobs early in the morning, which is our customers' primary time for demand. On the other hand, it also provides us with economy of scale and ensures productive daily routes, because we always have some grease traps (available for cleaning) so that we can fill the tank."

BIOREMEDIATION IS KEY

The company's core business remains bioremediation, which involves either bi-weekly or monthly service calls. Bioremediation is becoming more and more popular in Slovenia, and Habicht says it provides a built-in customer base for his company's other services.

"I want to emphasize the value of regular maintenance," he says. "Supermarket or restaurant owners see that there is a product working all the time and taking care of the drain lines, as opposed to having to call someone to take care of a backup. It's a preventative approach."

Moreover, BIOPLUS only cleans grease traps if the customer uses the company's bioremediation products, which allows better control over the quality of the grease trap waste. That's important because disposal of grease trap waste, which usually involves digesters, is tightly regulated in Slovenia, Habicht says.

"Treated (grease trap) content is easily transformed into energy because it's already inoculated with beneficial bacteria that helps ferment the grease in a digester," he notes.

Bioremediation utilizes specialized bacteria that effectively softens grease trap content and degrades the grease. The process produces enzymes that separate and change the structure of grease molecules and allow bacteria to consume it and change it into water and carbon dioxide. The issue is finding employees with a high work ethic. We are very slow in recruiting employees ... it takes a lot of time to hire someone. We cannot afford to make mistakes because it takes several months to fully train someone.

- Mihael Habicht

"We still have to pump out the trap, but it's much easier because the content is softer, and overall it requires less-frequent (pumping) – maybe every four or six months as opposed to every other month," Habicht says. "That appeals to customers, whose expenses decrease through less frequent pumping. Plus, they also achieve cleaner drain lines and cleaner water goes into the public sewer systems.

"On some days, we can pump as many as seven or eight traps in one go because of the bigger (MAN) truck and our large customer base," he adds. "Also (because of the bioremediation), we can decide when to pump the grease traps. It gives us more control over scheduling, as opposed to responding to emergencies."

HOW IT WORKS

The bioremediation product usually comes in liquid form. But since that makes it expensive to transport, Habicht buys it in highly concentrated powder form. Workers mix the product with water in a sterile bag, then pour it into a 5-gallon container, which serves as a reservoir for automatic dispenser treatments regulated by an adjustable pump.

The dispenser is mounted on a wall by a business's busiest sink. The product travels from the dispenser into the system through a plastic tube, which is inserted into a small hole drilled into a drainpipe beneath the sink.

"We can adjust the volume of the dose and the frequency of injections," Habicht says. "Each situation is different, but we usually suggest 12 cycles per day that last about 15 minutes each. That empties a 5-gallon jug in 14 days."

The first thing customers notice is a reduction in bad odors, followed by freer-flowing drains, Habicht says.

"Customers quickly learn the advantages: a steady service schedule that helps them avoid big problems, keeps the lines free-flowing, reduces their BOD (biological oxygen demand) values from grease traps and helps them provide a good record with inspection offices," he explains.

To dispose of grease trap waste, BIOPLUS relies primarily on digesters, which are more common in Slovenia than in the U.S. That's because pumpers are not allowed to land-apply grease trap waste, and many treatment plants don't have permits to accept it. Digesters ferment grease trap waste, creating a biogas byproduct used to produce electricity, Habicht explains. Technicians Andrej Kusar (left) and Bernard Kozuh run an operations check of their service truck before heading out on a day of grease trap pumping.

"We cannot set up a compost facility or an independent grease trap treatment system because such activities are strongly regulated here," Habicht points out. "And even if we could, we simply cannot collect enough material to justify the expense."

Because the country is relatively small, digesters and waste disposal plants are generally accessible, he notes.

MORE DIVERSIFICATION COMING

Sustaining growth within a limited geographic area is a constant challenge for BIOPLUS, Habicht says.

"At this stage, where we already cover a majority of the (grease trap cleaning) market, we have to rearrange ourselves and look at new

opportunities, such as the residential market," he explains. "In Europe, septic tanks will be banned by 2017. So if you're not on a sewer, you must set up individual treatment plants, with few exceptions. This represents a big business opportunity in terms of pumping and bioremediation."

BIOPLUS also expects to increase revenue through its role as a distributor for One Biotechnology bioremediation products; BIOPLUS already sells the bacterial cultures to businesses that maintain small treatment plants, he says.

"Because we are a partner, we're able to provide our customers with a number of other products," Habicht says. "Some are specialized for different substances and contaminants, such as hydrocarbons, and we also cooperate with engineering companies that buy these products for maintenance of their treatment plants. This is a growing market."

EXPAND THE TERRITORY

Habicht also sees potential for growth beyond Slovenia's borders. The country is one of six former members of the Socialist Federal Republic of Yugoslavia. Slovenia became a member of the European Community in 2004, and Habicht hopes the other five will soon do the same.

"Then customs and business barriers will fall, and that will provide opportunities for expansion in neighboring markets," he says. "Most of our major clients are already present there, which would make (market) entry easier." ■

MORE INFO

Freightliner Trucks A Div. of Daimler Trucks NA 800/385-4357 www.freightlinertrucks.com

Honda Power Equipment Group 678/339-2600 www.powerequipmenthonda.com

Jurop www.jurop.it

One Biotechnology 800/951-4246 www.1biotechnology.com (See ad page 30)



OUR DOWNTIME RECORDS INDICATE YOU WON'T HAVE ONE.



Just as a chain is only as strong as its weakest link, so too is your equipment and its geardrive. To ensure you avoid downtime, make sure you request Superior gearboxes. Since 1975 we have used our expertise to set performance and reliability standards in the mobile liquid pumping industry.

YES, THERE IS A DIFFERENCE.

Do you really want to trust an unproven gearbox to drive your powertrain and your company's success? We've developed a proud reputation as the industry's premiere geardrive manufacturer; and truly superior mobile liquid pumping companies like yours require truly Superior gearboxes like ours...therefore, no worries about downtime.



superiorgearbox.com

AUTHORIZED DISTRIBUTORS:

National Vacuum Equipment | Traverse City, MI | 800.253.5500 | www.natvac.com Masport Incorporated | Lincoln, NE | 800.228.4510 | www.masportpump.com

it you've never the	riea Bioune,	cut nere
Yes! Send me your FREE BioOne for myself how I can build sales i		
BioOne _® , the unique, patente product for Grease Traps, Dra and Septic Systems		
Name Company Address	U.S. EPA	BIO COME COMMERCIAL BORDOSICAL TREATMENT Deprodes face alike graves, and other fixed water that came and and the face alike graves, and other fixed water that came and the fixed water that and the Biother and the state and the state and the state and the Biother and the state and the state and the state and the Biother and the state and
City StateZip Telephone	Recognized for Safer Chemistry www.epa.gov/dfe	Mars of dama for entropy. Mars of dama for entropy. The Tar of the American Honorem Foreners Tar of the Control of the American Honorem Foreners Tar of the American Honorem Foreners Mars of the American Honorem F
Fax or call Pat Patterson at 8	800-951-4246	-

One Biotechnology - P.O. Box 758 - Oneco, FL 34264 - 800-951-4246 - 941-351-0026 Fax - pat@1biotechnology.com



BEST ENTERPRISES, INC.

All 304 Stainless Steel!

This unit is in stock and on sale!

Call us today to customize your unit the way you want it. 1-800-288-2378





Call today to ask about our fall sale on in-stock units.

1-800-288-2378

Slide In's On Sale Now!



Ford



Best Enterprises, Inc. Cabot, Arkansas 1-800-288-2378 (501)988-1905 Fax: (501)988-2880

www.bestenterprises.net



Quality is always our number one priority!

If it's not Stainless, it's not good enough!

We offer a ten year limited warranty on our stainless steel tanks.





Dewatering Made Simple

Flo Trend® Systems Inc. • (713) 699-0152 • (800) 762-9893 • www.flotrend.com • sales@flotrend.com



From coast to coast the most economical and simple way to dewater sludge. Do away with aging drying beds. Quit hauling water for disposal just because 1-2% are solids. Don't even consider complicated, expensive and hard to maintain mechanical dewatering devices. The Sludge Mate[®] together with the Poly-Mate[®] forms a dynamic duo of dewatering, only from Flo Trend[®].



 The TSF Company Inc. | 2930 S St. Phillips Rd. | Evansville, IN 47712

 Toll Free:
 1-800-843-9286 | 812-985-2630 | Fax:
 812-985-3671

 E-mail:
 tsftuffjon@sbcglobal.net | web site:
 www.tuff-jon.com





Get Ready for The in State

The industry's biggest show will return to the Hoosier State in 2013 By Luke Laggis

The Pumper & Cleaner Environmental Expo International will return to Indianapolis Feb. 25-28, 2013, bringing back everything that made the 2012 Expo a huge success along with some new features to help attendees get even more out of their time.

"Once a year there is a gathering of the best in the industry," says Bob Kendall, co-founder of COLE Publishing and president of COLE Inc. "The best manufacturers, dealers and suppliers meet with the best pumpers, cleaners and service contractors. This gathering provides unequaled opportunity to see, learn, grow and develop their businesses."

The best manufacturers, dealers and suppliers meet with the best pumpers, cleaners and service contractors. This gathering provides unequaled opportunity to see, learn, grow and develop their businesses.

- Bob Kendall

Education Day will kick off the 2013 Pumper & Cleaner Expo, providing an opportunity to acquire the strategies and technical know-how to push your business or utility forward. Topics cover everything from *Pump Choices and Settings* to *The Science and Engineering of Onsite Wastewater Treatment*. Pumpers, cleaners and other wastewater professionals will have the opportunity to learn from the industry's top experts, gaining insight on best practices and strategies for growth and success. Education Day also facilitates free dialogue among your peers, so you can seek and share advice and experiences that competitors might otherwise keep to themselves. It's a day dedicated to helping you expand your knowledge base and improve your craft.

The learning opportunities won't end when the final session lets out on Monday afternoon. Educational seminars also are slated for Tuesday and Wednesday, and Roundtable Discussions will be held Thursday morning. In fact, this year's Expo features one of the most expansive lineups of educational opportunities in the event's 33-year history. Attendees will learn about new tools, technologies and methods for solving specific problems; fine-tune your knowledge of basic in-thefield practices, and learn business leadership skills that transform your performance and profit. Expo education courses count toward continuing education credits in many states. Check out the Expo website (www. pumpershow.com) for specific information on your state.

Of course, it's not all about the classroom. The massive display of tools, trucks and technology helps contractors stay on the cutting edge of equipment advances. The Pumper & Cleaner Expo is the only place where you meet all the major manufacturers, kick the tires on the latest equipment, and network with the people who know this industry best.

A record 92 percent of attendees at the 2012 Expo said they would be coming back in 2013, so you can be assured of gathering with the best people in the industry.

"There's no better place to network with others who understand your business," Kendall says. "The free exchange of knowledge and experience is priceless. There's no better place to learn how to become more profitable."

Last year, 501 exhibitors filled more than 550,000 square feet on the show floor, and the response is already up from new companies interested in the 2013 Expo. The list of exhibitors is continually updated on the Expo website, which you can also use to preview the educational sessions, study the interactive floor plan, plan your itinerary and search for hotel rooms. Three new hotels near the airport will provide convenient accommodations for those with early or late flights.

Indy also has plenty to offer outside the Expo hall, including a range of museums, entertainment venues and shopping opportunities, and there are hundreds of restaurants within a short walking distance of the Convention Center. Find your favorite spot to meet up with clients, colleagues and friends, and find out what "Hoosier hospitality" is all about.

While planning your itinerary, be sure to keep Tuesday night open for the Industry Appreciation Party and Craig Morgan concert at the JW Marriott Hotel, connected to the Convention Center. It promises to be a great night.

In fact, the Expo promises four great days. If you haven't been to the Expo, jump onto the website and take a look at everything it can offer you and your business. It's easy to plan the trip, and you'll walk away with a better perspective on your business and the entire industry.

See you in Indy. 🔳



For a Complete Catalog and Pricing Call 1-800-382-7009



HEAVY DUTY MULTI-PURPOSE

Fits most commercially available:

- Risers
- IPEX PVC Ribbed Pipe
- Corrugated Pipe

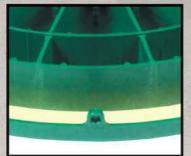
FREE FREIGHT **ON FULL CARTONS!**

LID MAY BE USED WITH OR WITHOUT CONCRETE CENTER



Secured by 6 Vertical and 4 Horizontal Safety Screws. Screws Included.

Corrugated HDPE Pipe



Foamed-in Permanent Polyurethane Gasket.

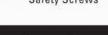


Holds up to 70 lbs of Concrete for Added Safety.



Water-TITE™ Vertical and Horizontal Safety Joint Screws

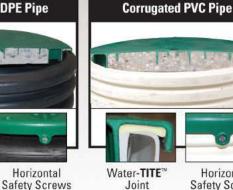








Water-TITE™ Joint



Horizontal Joint Safety Screws





Tuf-Tite[®], Inc. 1200 Flex Court, Lake Zurich, IL 60047 www.tuf-tite.com 800-382-7009

© 2010 Tuf-Tite®, Inc All rights reserved



Vertical Safety Screws















PROUD DISTRIBUTOR OF:



INDUSTRY LEADING INNOVATION & CUSTOMER SERVICE. EXPECT MORE. 800.342.0887 CHANDLEREQUIPMENT.COM

TANK COMPONENTS • VALVES • VACUUM PUMPS

NOT ALL GREASE IS THE SAME

Just as no two restaurants are identical, neither is the waste they generate. A large fast food restaurant will not treat its grease waste the same as a Mom & Pop breakfast diner or a fine dining restaurant.

If you service grease waste, we have several products formulated for the specific type of facility that you service. At Cape Cod Biochemical Company we have been formulating products exclusively for pumping contractors since 1976. Our products are made to address the issues that you see on the job every day. We have hands on experience in the field; and we speak your language. When you call us for advice, we give you honest advice. We don't just try to sell you something. And we have educational materials to explain the components of the grease waste system, the operation of the components, and how to keep systems running properly.

Please consider these pumper specific grease treatment products from the **CCLS** Family of Products to enhance your capabilities and your bottom line:

BIO-REM E-D: extremely high count, USDA Approved granular bacteria/ enzyme product with superlative grease capability, for use in small grease traps and to help restore drainage to sluggish drain fields and leaching structures. There is no stronger grease product. Requires manual application.

BIO-GEL Gelpac: A gel form of BIO-REM E-D. Can be cut to treat any size interior trap. Comes in a mesh bag with tether. Can be suspended in trap or lift station.

DrainMaster: liquid bacteria enzyme concentrated drain cleaner removes buildup and has excellent grease capability for automatic injection into larger grease waste systems via timed metering pump. Can also be used as drain cleaner/ deodorizer. Has fresh fragrance.

Since we do 95% of our business with pumping contractors, these products have evolved in response to the needs of <u>YOU</u>, the pumping contractor.

For details on these and our other products, as well as our program of *"Better Business Through Customer Education"* please call us at 1 800 759 2257. We'll send you our complete catalog—including prices and all educational materials—or visit us at SepticOnline.com.

Please call today. Your customers and your bank account will appreciate it, and so will we! Thank you.

- Rick Howe, President

GREEN PRODUCTS FOR SEPTIC PROFESSIONALS SINCE 1976



715-546-2680 • www.threelakestruck.com • skeeter2680@frontier.com



1995 Ford L9000 with Guzzler Hazardous Unit \$69,500

Cat 3306 @ 300 HP, 10 spd., 240" WB, 18K front, 45K rear, boom kit, 1/2 opening rear, dumping, hazmat tank and pump, Manufactured by Guzzler



2006 Peterbilt 379 4,000 gal. Pres/Vac Unit \$99,500

Cat C-15 @ 466 HP, tandem, 4,000 gal. cap., 2008 Jurop LC 420 pump, 610K miles showing, tool box's, U.S. Tank company, 3' manway, dual air deaner, dual stack, jake, cruise, AC, 13 spd., 6" valve heater, air ride, susp. dump, power mirrors, htd. mirrors, hose trays, 250" WB, 12k/38k axles, alum. rims



2002 International 2574 Jet/Vac Truck \$139,500

Cat C-10 @ 350 HP, Allison auto, Hendrickson spring/beam susp., power divider, cruise, Vac-Con Model: PD4211LHAN, 8,658 hrs., telescoping boom, strobes, full opening dumping tank, Roots blower, high pressure wand, central grease system, water tanks, direct drive hyd. pump, remote, hyd. leg reel support



2002 Mack CH613 with Marsh 2,300 Gal. Hazmat Tank \$82,500

Mack E-7 @ 400 hp., 9 spd., air ride, jake, cruise, AC, susp. dump, power divider, heated mirrors, elec. windows and doors, hub piloted steel rims, 22.5 tires 2001 Marsh Dot 407-412 coded tank, pop off, grounding cable, air controls to rear, 20" manway, catwalk, 12k/38k axles



1992 Kenworth T600 Hazardous Material Vacuum Transfer Truck \$49,500

Cat 3406B @ 330 HP, 10 spd., diff lock, chemical circulation system, Reyco susp., dual air operated tanks w/Fluid King mechanical sealed pump, Batts Industry Coated Tanks, catwalk, roll over protection



2001 Freightliner FL 112 Vactor 2100 Vac Truck \$119,500

Currmins ISM @ 370 HP, 18k/40k axles, Tuff Trac susp., full lockers, Allison automatic, cruise, AC, Vactor 2100 Series, front controls, Positive Displacement Fan blower, aux. hyd., power washer front and rear, 425 float steers on alum. rims, 4 fresh water tanks, JD diesel aux. power for blower



1999 International with Guzzler Classic Vacuum Truck \$59,500

Cat C-10 @ 305 hp., 10 spd., power divider, cruise, Hendrickson susp., 1112 hrs. showing on meter, Roots dual lobe blower, 1/2 opening rear, dumping body, 18 vyrd. cap., 18k/40k axles, 238"WB



2002 Kenworth T800 Single Barrel Pres/Vac Truck \$95,000

C-12 @ 430 hp., 8LL trans., Hendrickson spring/beam susp., 12,860 lbs. front/46k rear, 4.33 ratio, AC/jake/cruise, power divider, full opening / dumping rear, vibrator, dbl. frame, Transway TSI 1200 pres/vac pump, hose trays, tool box, dual 4" off rear, 4,200 gal. cap., pressure washer/mini jet.



1999 Kenworth T800 Single Barrel Pres/Vac Truck \$85,000

Cat C-12 @ 430 HP, 8LL, 4.34 ratio, Hendrickson spring/beam susp., power divider, jake, cruise, heated mirrors/block heater, 6" and 4" ports on rear, hose trays, vibrator, dbl. frame, tool boxes, Transway pres/vac pump, full opening rear, dumping, 4,200 gal. cap.



2006 Sterling Tri-Axle Day Cab with Fruehauf Vac Tanker Combo \$49,500 Tractor/\$59,500 Trailer

C-15 @ 435 HP, Airliner air/spring susp., heavy 10 spd., full lockers, wet kit, htd. mirrors/block heater, AC, power windows, dual alum. fuel tanks, dual stacks, alum. rims, 22.5 rubber, 14,600 lbs. front/46k rear, air up/down pusher, 236"WB, 1984 Fruehauf ring vacuum tanker, 6,200 USG, 8' 3" on spreads, tri-axle, front axle is a air up/down pusher, New hyd. driven, 607 Challenger PresVac pump, DOT 312SS, air ride, hose trays, alum. rims

FINANCING AVAILABLE THROUGH DIRECT CAPITAL • WARRANTY PROGRAM & DELIVERY AVAILABLE

PRODUCT ROUNDUP

Flow Control

Dewatering units, containment systems, additives and portable vacuums keep grease under control and drain lines open

By Ed Wodalski

Keeping grease from building up and clogging drain lines can be an ongoing problem as well as a source of additional income. Collection and separation systems can turn fats, oils and grease into liquid gold when sold to fuel processors. Scheduled maintenance programs, including the addition of grease-eating microbes, also can provide an extra source of income for your septic pumping business. Here are a few products to consider when looking to expand or update your grease handling service.

DEWATERING SYSTEMS

AQUA-ZYME DISPOSAL SYSTEMS



The ADS 30-yard (15-yard available), open-top, roll-off dewatering unit from Aqua-Zyme Disposal Systems can be filled with 22,000 to 25,000 gallons of wastewater treatment plant sludge, septic and/or grease trap waste at 1- to 2-percent solids in about two hours. After draining

for 24 hours, the unit can be hauled to a landfill or composting facility for disposal. Sludge volume is reduced by up to 80 percent with reductions to 90 percent in BOD, COD, fats, oils and grease and TSS. Effluent is clear and sewerable. The unit has few moving parts. Filter media is warranted for five years. Standard equipment includes roll-over tarp system; sliding aluminum splash guard; side, floor and center screens; 1/4-inch floor plate; 7-gauge side plates; four door binder ratchets; eight drain ports with camlock fittings; two inlet posts, and a long-handle scraper. Average lifespan is 12-14 years. Units can be hauled with a standard capacity roll-off truck. **979/245-5656; www.aqua-zyme.com**.

expanded from one to six channels to accommodate increased flow rates. The press requires little operator attention and can achieve a volume reduction of up to 90 percent on grease trap sludge. **418/423-4241;** www.rotary-press.com.

PRIME SOLUTION



The Rotary Fan Press from Prime Solution uses continuous pressure differential technology to dewater sludge and slurries. The unit's slow rotational speed (less than 1 rpm) offers semi-automated operation. Features include selfcleaning, low maintenance, portability and minimal footprint. Few

mechanical parts and slow rotation also reduce noise and vibration and improves the lifecycle of the machine. Available in several capacities, the unit's compact design allows for easy installation. Skid-mounted systems (trailer mounted available) include central operator control panel, feed pump, polymer system and inline mixing. Plant integrated controls are available. **269/694-6666; www.psirotary.com**.

FOURNIER INDUSTRIES



The rotary press dewatering system from Fournier Industries is designed to handle municipal sludges, industrial sludges and grease trap waste. Sludge is introduced to the system under constant pressure, dosed with

polymer and passed through a variable speed flocculator. Sludge then enters the circular dewatering channel through fine mesh screens. Dry cake exits the press and drops into a collection bin or is conveyed for disposal. Once the dewatering cycle is complete, the press goes through a wash cycle once per day for five minutes to maintain the machine. The enclosed press eliminates the need for odor control and can be

ADDITIVES

CAPE COD BIOCHEMICAL



DrainMaster liquid concentrated drain cleaner from Cape Cod Biochemical can be manually applied to smaller, interior grease traps to remove buildup and odor or injected into larger grease waste systems with a timed metering pump (available for this application). The pump is simple to install and set. It plugs into a 120 VAC outlet and has a

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

clock timer that can be set to inject the cleaner at night after the facility



Complete Details At www.AmazingMachinery.com

2288 Gunbarrel Rd, Ste. 111-151 • Chattanooga, TN 37421

4000 PSI

JETTER

SYSTEM INCLUDES

Sewer Camera Repair Center Now Open

130' SEWER CAMERA with 512HZ SONDE

SYSTEM INCLUDES

- » 7" Flat Screen LCD in ABS Case » 20" Storage Reel
- » Recordings to SD card
- » High Quality Color Camera
- » 1-1/8" Diameter Camera Head
- » 512Hz Sonde Transmitter
- » Stainless Steel Camera Body With Sapphire Lens
- » Camera Head Is Waterproof To 500'
- » 10 White LED Lights w/Dimmer
- » 11" Steel Spring Leader
- » 130' long, 3/8" Super Slick Push Cable

» Operates On 120 Volt Electricity » Two-Year Mfg. Limited Warranty

- » Ships In 4-7 Days - Via UPS
- Ground
- **SALE Price**
 - Your Choice
 - 3/4 HP **CABLE MACHINE**

Engine

SYSTEM INCLUDES » Grease Fitting On Drive Shaft

» Air-cooled, 4-Stroke, single cylinder

» Adjustable Pressure

» Aluminum Cart

» Low Oil Automatic Shut Down

- » *3/4" x 75' Slotted End Inner Core Cable
- » Welded Tubular Steel Frame
- » Extendable Handles With 2 Loading Wheels
- » 3/4hp Electric Motor
- » Overload Protector & Manual Reset
- » In-Line Ground Fault Interrupter
- » V-Belt Pulley Drive System

- » Rugged 19" Corrosion Resistant Drum
- » Exclusive "Tilt-A-Way" Three **Position Power Feed**
- Switch

» Quick Release Drum

- (For Two Machines In One Option)
- Generators / Air Compressors / Pressure Washers / Trash Pumps

- » Honda GX390 Commercial Quality OHV » Integrated Unloader valve
 - » Aqua Pulse Feature
 - » Five Foot Jumper Hose
 - » Deluxe Jetter Hose Reel with Stand
 - » 150 ft 1/4" Low Friction Sewer Hose
 - » 50' Pressure Washer Hose
 - » Pressure Washer Gun / Wand
 - » Ceramic Plunger Tri-Plex Pump
 - » Ball Valve Water Flow Operation
 - » 1/4" Ram Sewer Nozzle
 - » 1/4" Laser Sewer Nozzle
 - » 1/4" Rotating Sewer Nozzle
 - » Five Pressure Washer Q.C. Tips
 - » Chemical Injector
 - » Designed To Clean 2" to 6" Lines

- » Extra Large Stair Climber Skids » Industrial Grade Pneumatic Foot » 5 Piece Cutter Set

closes or prior to a period of relatively low flow to maximize retention. **800/759-2257; www.septiconline.com**.

CHEMPACE CORP.



Specially formulated and packaged bioForce SK1 from Chempace Corp. is made to be directly added to drains, grease traps, garbage disposals and beverage tower drains. The additive contains microorganisms capable of degrading a range of animal and vegetable oils and

grease. To ensure optimal performance, the organisms are blended with high potency nutrients, stimulants and surfactants. Regular use eliminates buildup of grease in pipes and eliminates odor from drains. **800/423-5350; www.chempace.com**.

DRAINBO PRODUCTS



All-natural Drain and Grease Trap Treatment from Drainbo Products features seven strains of bacillus bacteria that multiply to produce a film of fats, oils and grease digesting cultures that work to clean and maintain drain lines. Regular application can reduce and eliminate line and trap deposits, control odor and reduce overall maintenance costs. The product is certified by the National Products Association and is USDA-

certified biobased. 877/372-4626; www.drainbo.com.

ECOLOGICAL LABORATORIES



PRO-PUMP/DGTT drain and grease trap treatment from Ecological Laboratories contains eight microbial cultures that degrade FOG deposits and fatty acid compounds. The liquid concentrate is pleasantly fragranced and designed for indoor application in commercial effluent drain lines and grease trap systems. It works on contact, establishing an active bacterial population that keeps lines and grease

traps free flowing and odor free. 800/326-7867; www.propump.com.

GREEN WAY PRODUCTS BY POLYPORTABLES

Earth Works Water Treat GT from Green Way Products by PolyPortables combines two technologies to control odor, reduce fats, oil and grease, reduce corrosion and promote healthy wastewater containment systems. The primary active ingredient comes from natural organic material mined from earth that builds hydrogen sulfide, mercaptans and ammonium compounds to reduce odor. Selective



bacteria are blended to break down waste and reduce suspended solids. The readyto-use treatment is designed for use in grease traps, drains and septic systems. It also reduces odors associated with grease traps and is available in multiple fragrances in 1-, 5-, 7- and 55-gallon

containers. 800/241-7951; www.greenwayproducts.com.

MICROSPRING INTERNATIONAL



The FastFlow drain treatment from MicroSpring International is designed to prevent backups and improve drain flow. The gel features scum-eating bacteria in a vegetative state that binds to the buildup and eats it away. The drain treatment is time-released for continuous prevention. **866/864-3150;** www.microspringintl.com.

NORWECO



Bio-GEM grease-eliminating microbes from Norweco feature a blend of cultured bacteria, enzymes and natural growth accelerators to digest grease, fats and oils in wastewater treatment systems, lift stations, septic tanks, sand filters, drain lines and commercial grease traps. The digester works in aerobic or anaerobic conditions to convert common FOG into carbon dioxide and water. Regular use eliminates odors,

stabilizes effluent quality and reduces system maintenance. Available in 1-, 5- or 55-gallon containers, the digester is environmentally safe. **800/667-9326; www.norweco.com**.

ONE BIOTECHNOLOGY



BioOne bacterial inoculant from One Biotechnology is designed to degrade fats, oils and grease and other organic matter in commercial kitchen drain lines and grease traps through natural, biological digestion. The treatment contains live vegetative bacteria with no emulsifying agents or added enzymes. **800/951-4246; www.lbiotechnology.com**.

COLLECTION, CONTAINMENT SYSTEMS

BIO-MICROBICS



FOGHog grease traps and interceptors from Bio-Microbics are designed for restaurants, food service and processing facilities, hospitality and grease-processing locations. Installed in commercial kitchens, units retain more than 95 percent of all floatable 33.5 inches wide,78.2 inches high and fully private

HIGHRISE

Because it fits your customer's needs, it's the right fit for you.

This is a restroom your competitors cannot compete against. The unique size and features of the HIGHRISE make it the most functional portable restroom available for use in the construction market.

To learn more about the unique features of the HIGHRISE visit our newly updated website. If you want, post a comment on our Facebook page or send a tweet.

If you want to talk to someone about the HIGHRISE, contact your Area Manager or a Customer Service Representative.

> 800-328-3332 www.satelliteindustries.com



>>>move ahead with Satellite

substances, including fats, oils and grease, soap and waxes. Made of corrosion-resistant polyethylene, the passive interceptor separates FOG-laden waste from sinks where food is prepared. Available in 20-, 50-, 75- or 100-gpm models, units are PDI and IAPMO tested. **800/753-3278;** www.biomicrobics.com.

vacuuming and dumping, lid overhang to prevent contamination, tapered design for nesting and lip overhang to prevent spillage. Options include bolt-in screens, heater coils for 300- and 360-gallon containers and dollies with quick-disconnect casters on the 100-, 200- and 300-gallon containers. **877/468-9278; www.wastequip.com**.

XERXES CORP



Grease interceptors from Xerxes Corp. are available in 4-foot and 5-foot diameter models (600 gallon, 1,000 gallon and 1,500 gallon capacity) and 6-foot diameters (2,000 through 8,000 gallon capacities), as well as IAPMO and ANSI Z1001 approved models. Accessory

options include 4-inch diameter Schedule 40 PVC inlet and outlets, internal sanitary tees and various internal pipe configurations. Other features include two 24-inch openings for access and a full-plate baffle. **952/887-1890; www.xerxes.com**.

PROCESSING SYSTEMS, SECURITY

DOWNEY RIDGE ENVIRONMENTAL CO.



The Greasezilla brown grease separator from Downey Ridge Environmental Co. includes a 10,000-gallon (10 feet in diameter, 13 feet high and 26 feet long) insulated, double-walled horizontal reactor tank with two sets of large diameter internal heat transfer tubes, external inlet and outlet manifolds, top coffer dam with

lightweight cover for inspection and final filtering and pumping of heated grease, 4-inch fill and drain with male couplings, access ladder and safety rails to catwalk, and high-level alarm. The system includes a skid-mounted hydronic brown grease heating unit (11 feet 6 inches wide, 7 feet 6 inches deep and 7 feet high), 120-volt control box and 480-volt 3-phase pump motor. Other features include digital fuel temperature control, 300-gallon stainless steel fuel tank, 800,000- to 1 million-Btu boiler modified to operate on brown grease harvested from the system. **304/658-4778; www.greasezilla.com**.

CONSOLIDATED FABRICATORS CORP.



Standard and heavy-duty grease bins from Consolidated Fabricators are available in sizes from 89 to 336 gallons with a variety of grills and locks. Plastic Eco Tubs, in 42- and 78-gallon sizes are designed for use indoors. Roll-offs, dewatering and steel tanks are available. **800/635-8335; www.con-fab.com**.

CRESCENT TANK MANUFACTURING



The Model 1600 flat tank from Crescent Tank Manufacturing reduces the need for separate pickup/delivery and service vehicles, saving on fuel, insurance, payroll and maintenance costs. Features include one tank to service and lift gate for placing

55-gallon drums on the deck. The waste tank has a 1,600 gallon capacity. In colder climates, the waste tank deck can haul 55-gallon drums if oil is too thick to vacuum. **585/657-4104; www.crescent-tank.com**.

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

POLYLOK/ZABEL



The PL-625 effluent filter from Polylok/Zabel is designed for grease trap applications. Its 1/32-inch filtration has been shown to reduce fats, oils and grease by 60 to 98 percent. The filter can be used in onsite wastewater systems that require a finer level of TSS removal. The filter is rated for 8,000 gpd, features 625 feet of linear filtration, accepts 4- and 6-inch Schedule 40 pipe and has a built-in gas deflector. Other features include an automatic shutoff ball when the filter is removed, alarm accessibility and acceptance of a PVC extension handle. **877/765-9565; www.polylok.com**.

WASTEQUIP



Grease Vault containers from Wastequip are available in 100-, 200-, 300- and 360-gallon sizes. The steel containers are designed for restaurants, groceries and other institutions that generate grease. Features include lid options and locking mechanisms to deter theft and a design that allows the containers to be emptied by

LOCK AMERICA INTERNATIONAL



proof mechanism with more than 20 million key codes. **800/422-2866**; www.laigroup.com.

The disk lock from Lock America International combines a pick-resistant mechanism with hidden shackle for medium security biodiesel facilities and grease collection and recycling sites. For greater security, the Millennium solid body lock offers a nearly pick- and drill-

(.

-

S

In Stock or Custom Built Financing and Lease Options Aluminum or Stainless Steel 300-6000 Gallon Trailers Many Trucks In Stock

www.tanktec.biz 1.888.428.6422

Combo Trucks Service Septic Systems and Portable Toilets! On your choice of chassis

Choice of tank size (2200 gallon shown) Choice of pump system (230 cfm HXL75 shown) Wash down system Bucket fills Manways

Toilet hauler with bumper Hitch

Ready to work!

Many options available!

Contact us:

Steve Nelson snelson@tanktec.biz

tanktec.biz

1.888.428.6422

Contact for a quote!

Ford F550 SK1200 Portable Restroom Tank

ankig

1200 gallon aluminum tank (900/300) Masport HXL4V pump system Flo-Jet wash down system Unit hauler with trailer hitch Options available (some options shown)

550 V10 gas engine 550 V10 gas engine Standard tank

950 gallon tank also available Larger pumps available Larger cabinets available More!

Visit tanktec.biz/sk1200 for more info

Ford F750 2800 Aluminum Vac Tank F750, 33,000 GVW, 6-speed Jurop RV360 Raxor Pack pump system

Jurop RV360 Raxor Pack pump system 4" inlets, 6" discharge Toolboxes \$102,000



Many trucks IN STOCK Or Custom Built!

BUY NOW for your 2012 tax deduction!

TankTec

DOT Tanks, Aluminum, Stainless, Carbon Steel, Hoist and Door Tanks, Jetters, Blowers-WE DO IT ALL!

In Stock or Built to Order We KNOW how to help!

300 Gallon (200/100) \$7650(single section) \$6900450 Gallon (300/150) \$8150(single section) \$7600550 Gallon (370/180) \$9700(single section) \$9400

Honda 5.5hp and Conde 70 cfm vacuum/ pressure pump. Add \$625 for Honda 9hp and Conde SDS6 116 cfm pump

Standard Features: Aluminum Construction (Also Available in Steel and Stainless Steel) 30' Vacuum Hose with Wand and Valve Whale Water Pump Honda 5.5 hp Electric Start Gas Motor With Conde 70 cfm Vacuum/Pressure Pump (9 hp With Masport 106 cfm Pump or Conde 115 cfm Pump Available)

Visit tanktec.biz/si for more info www.TankTec.biz

Completely Self-Contained and Ready to Work! Larger or Smaller Sizes, Trailer Mount, Custom Configurations and Many More Options Available

PORTABLE VACUUMS

DYNA-VAC EQUIPMENT



The 50-gallon Dyna-Lite portable grease pumping system from Dyna-Vac Equipment is 28 1/2 inches wide to fit through most doorways. It features a positive displacement 49 cfm vacuum pump, vacuum up to 15 inches Hg, full-opening top

hatch, epoxy-coated interior, exhaust deodorizing filter, automatic highlevel auto shutoff and 110-volt outlet run-dry electric motor. Other features include 10-foot, 2-inch grease vac suction hose, steel, stainless or aluminum construction, full-opening cleanout hatch, tubular steel frame and 2-inch top inlet and lower outlet. Also available are 200- and 500-gallon trailer units. 888/298-8668; www.dynavacequipment.com.

WESTMOOR LTD.



The Conde ProVac Industrial Pumpout

waste pumping system

from Westmoor Ltd.

is designed for grease

service

pumping. The unit

quietly pumps at 120

gpm with the flip of

a switch. A built-in

keeps odor to a

minimum. A flip of the

switch changes the unit

deodorizer

and

trap

exhaust

to pressure mode for offloading. Measuring 24 inches wide, the aluminum unit is easy to maneuver and fits through a standard door. Features include 115-volt/13.4 FLA motor, user-friendly front controls, hand parking brake, 25-foot retractable cord reel, hose rack and tool holder, 10-foot, 2-inch Plastiflex suction hose and wand assembly with 6-inch cleanouts top and back. **800/367-0972; www.westmoorltd.com.** ■

Case Studies:

DEWATERING SYSTEM KEEPS GREASE FROM ENTERING TREATMENT PLANT



Problem: Grease from the collection system and waste haulers was entering the Jackson Energy Authority wastewater treatment plant in Tennessee, causing high levels of fats, oil and grease, BOD and TSS. It also was clogging lines and interfering with normal biological activity at the plant.

Solution: Rather than jetting the lines, the plant chose to install a grease dewatering station

capable of handling 10,000 to 15,000 gpd, purchasing two Sludge Mate boxes from Flo Trend Systems to dewater the grease trap waste and return clear water to the intake of the plant.

Result: Dewatering is under the control of plant operator Tony Fitts. Grease haulers have a place to dump waste. The plant is able to set limits of less than 100 mL of FOG and less than 450 mL of BOD and TSS. Excess grease no longer enters the plant. To recover the cost of operation and fund repairs and upgrades when needed, the plant charges a per-gallon dumping fee. **800/762-9893; www.flotrend.com**.

DOSING PUMP SYSTEM KEEPS LINES FREE OF GREASE



Problem: In July 2004, a customer called Speedy Clean Drain and Sewer for a thorough

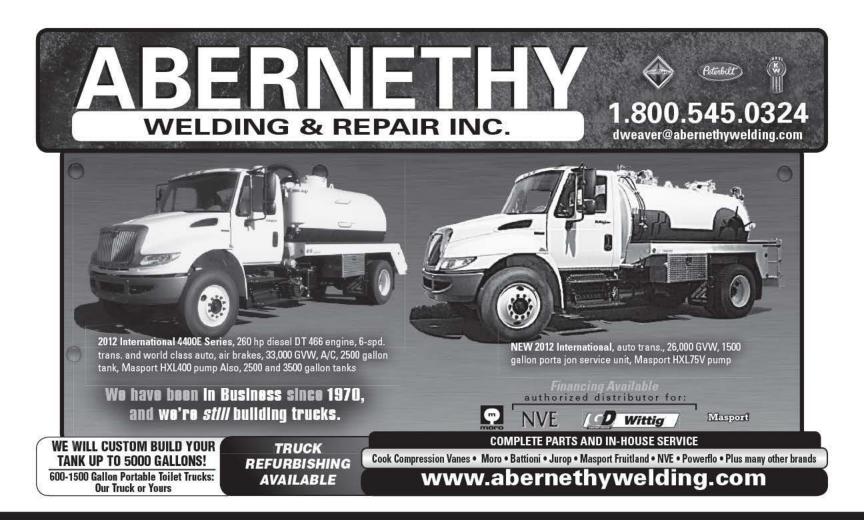
cleaning of a 50-gallon indoor grease trap that was backing up every five weeks.

Solution: Speedy Clean installed a Trap-Cleer dosing pump injection system into the mainline under the sink feeding into the grease trap. Two ounces of Liquid Trap-Cleer from Lenzyme was dosed each evening.

Result: In August, the trap was opened and inspected. The lines were clear and the trap was functioning as designed. In October, there was a 4-inch layer of grease at the bottom of the trap. The remainder of the system was operating as designed. After eight months, the trap required pumping. A second test showed the system was able to perform for eight months before requiring cleaning. A four-month maintenance program was established. After eight years, the system continues to work as designed. **800/223-3083; www.lenzyme.com**.

GREASE TRAP TREATMENT ENDS BACKUPS, ODORS IN RESTAURANT

Problem: A large seafood restaurant had been troubled by backups and odors twice a month





for several years despite frequent manual cleaning of the grease trap and drain lines. The wastewater system from the kitchen was served by a single in-floor grease trap. A series of sinks and floor drains were in place. Length of the mainline was 75 feet.

Solution: RoeTech Grease Trap Treatment from Roebic Laboratories was applied through two sinks upstream of the grease trap at the rate of 8 ounces per sink per day. The treatment was used for the first 30 days and applied through each floor drain at the rate of 8 ounces per drain per day.

Result: Odors were far less noticeable within the first week and disappeared completely after two weeks. There were no more backups and the foam from food processing ceased to be a problem in the floor drains. The system remains problem-free. Maintenance levels of grease trap treatment are at 85 ounces per week applied through two sinks and the four floor drains upstream of the grease trap. The trap has been opened only once for inspection and has not required manual cleaning since treatment began. 203/795-1283; www.roebic.com.

LIGHTWEIGHT GREASE INTERCEPTOR AN EASY CHOICE FOR ASSISTED LIVING CENTER



Problem: In May 2012, Norton Sewer Service was called to replace a corroded steel grease interceptor at an assisted living facility in Chicago. The 1,300-pound steel unit required a

special hoist for excavation. After it was removed from the pit, the steel was cut into eight pieces to fit through the service door.

Solution: The lightweight, high-density polyethylene (HDPE) Great Basin grease interceptor Model GB-75 from Schier Products replaced the steel unit. A built-in cover adapter was used to adjust the cover to finished grade without the need for an additional riser.



Result: The project took three contractors a combined 48 hours of work to complete. The new interceptor has a lifetime warranty. **800/827-7119; www.schierproducts.com.** ■

DESIGNED TO BE THE BEST EQUIPPED TO HANDLE THE WORST

Cusco hydro trenchers and vacuum trucks are built with the best equipment available, so you're sure to get optimal performance, even in the harshest environments.







305 Enford Road - Richmond Hill | Ontario, Canada - L4C 3E9



Designed with the operator in mind, Cusco trucks are easy to use. And should you ever need assistance, Cusco provides outstanding training and support.

CALL TODAY TO FIND OUT HOW CUSCO CAN CUSTOMIZE A SOLUTION FOR YOUR APPLICATION!

1.800.490.3541 www.wastequip-cusco.com









FEBRUARY 25-28, 2013 INDIANA CONVENTION CENTER - INDIANAPOLIS, IN

REPRESENTED INDUSTRIES

ERACLE

ENVIRONMENTAL EXPO

Septic Pumping Onsite Installation Portable Sanitation Dewatering Grease Handling Sewer Cleaning Laterals & Mainlinës TV Inspection Pipeline Rehab/CIPP Waterblasting High-Pressure Cleaning

3

Safety Equipment Confined Space Lift Station Maintenance Computer Software Industrial Vacuuming Hydroexcavation Underground Trenchless Pipe Repair Utility Location

And Much More!

Register by Jan. 25th to receive the early bird rate of \$50 per person!

\$70 per person at the door. Children 12 and under admitted free.

Or by calling 866-933-2653



DUANE SHELAR Shelar Sanitation • Jackson, Mich

"Can't afford to miss it!"

Duane Shelar loves talking to "strangers" – the top-flight pros he meets at the Pumper & Cleaner Expo. "If you're not going to the Expo, you're missing the whole point of learning about the industry," he says. "At a very low cost, you stay on top of things. It's wonderful to do the roundtable discussions and learn from others' experience. I had more fun at this show than any other!"

Join your industry in Indianapolis!

EBUCATION BAY SEMINARS MONDAY FEBRUARY 25TH

NAWT	National Association of Wastewater Technicians
8 a.m.	Introduction to Pressure Distribution
9:30 a.m.	Designing Systems, Boundaries and Barriers from a Soils Perspective
11 a.m.	Pump Choices and Settings: Decisions for Proper Operation
1:30 p.m.	Operation and Maintenance of Pressure Distribution Laterals
3 p.m.	Installing with Management in Mind: How to Get the Most out of Your System
4:30 p.m.	Design and Maintenance of Grease Interceptors
SSESE	Southern Section Collection Systems Committee
8 a.m.	Seven Powerful Tools for CCTV Inspection Perfection
9:30 a.m.	Easements — A Collection System Maintenance Nightmare
11 a.m.	Nozzle Science — The Next Generation of Tier 3 Nozzles and Beyond
1:30 p.m.	Pass or Fail — Is Your Company Going To Make It? How to Ensure Success
3 p.m.	Social Media and Web-Based Promotion: Is it Right for Your Business?
4:30 p.m.	Pipeline Relining and Rehabilitation Solutions
NOWRA	National Onsite Wastewater Recycling Association
8 a.m.	Time DosingWhy? How? And How Much?
9:30 a.m.	Loading Rates — How Much Can the Soil Take?
11 a.m.	Troubleshooting Pumps, Floats and Panels
1:30 p.m.	The Dirty Dozen — Toxins That Kill Septics
3 p.m.	How Installers Can Use the Poor Economy to Increase Profits
4:30 p.m.	Are Seepage Pits Really Bad?
8 a.m.	Designing Drip Dispersal Systems
9:30 a.m.	Designing Drip Dispersal Systems Soil Erosion Control During and After Septic System Installation Decentralized Wastewater Collection System Maintenance
11 a.m.	Decentralized Wastewater Collection System Maintenance

NEXSTAR Independent Residential Service Contractors Association

 1:30 p.m.
 The Art and Science of Business Management

 3 p.m.
 The Business of Contracting



NEHA	National Environmental Health Association
8 a.m.	What Makes a Professional in Onsite Wastewater Systems?
9:30 a.m.	Part One: The Science and Engineering of Onsite Wastewater Treatment
11 a.m.	Part Two: The Science and Engineering of Onsite Wastewater Treatment
1:30 p.m.	Education and Training: Professionalization of the Practitioners
3 p.m.	Management Models: Management and Becoming a Management Entity
4:30 p.m.	The Future of the Onsite Wastewater Industry: How to Make it Work for You!
NASSCO	National Association of Sewer Service Companies
8 a.m.	Ultraviolet Manhole Rehabilitation
9:30 a.m.	Convey Your Stormwater and Plug Your Holes!
11 a.m.	Jet Up! Sewer and Storm Water Cleaning
1:30 p.m.	Rethinking Collection Maintenance with Sewer Line Rapid Assessment Tool or SL-RAT
3 p.m.	Case Study of Cleaning Large Diameter Sanitary Sewers and Siphons

4:30 p.m. Pipeline Assessment Certification Program (PACP) 2013 Update Workshop

SCOTT HUNTER Business Coach

8 a.m. - 5:30 p.m. 2013 - Your Best Year Ever

NJTA/I	MCA	Waterlet Technology Association
8 a.m. 9:30 a.m. 11 a.m.	Selectir	and Efficiency — You Don't Have to Choose! 1g the Best Jetting Tip Doesn't Have to Be Scary xcavation — The Non-Destructive Solution
PHIL ST	EIN	Vacuum System Information
1:30 p.m.	Underst	anding the Power: Physics of Vacuum and How it Works
PSAI	Portal	le Sanitation Association International
4:30 p.m.	GAP: G	ood Agricultural Practices

DETAILED SESSION INFORMATION AVAILABLE AT: WWW.PUMPERSHOW.COM

Visit www.pumpershow.com for more information or to register today!

FEBRUARY 25-28, 2013

NDIANA CONVENTION CENTER • INDIANAPOLIS, IN

TUESDAY TRACKS

EXPO

CLE

FEBRUARY 26TH, 2013

TRANSPORTATION AND LAND APPLICATION

ENVIRONMENTAI

NTERNAT

8 a.m.	Driver Compliance and Certification: How to Meet DOT Requirements
9:30 a.m.	Staying in Compliance with 503 Regulations for Land Application
11 a.m.	Land Application: Case Study of a Long-Term Operation

INDUSTRY SAFETY

9

3

8 a.m.	One Piece Nozzles Enhance Performance and Safety
:30 a.m.	Confined Space Entry Permit and Equipment Review
11 a.m.	Utility Line Locating

SSCSC	
8 a.m.	Making Emergency Response Your Business
9:30 a.m.	How to Protect and Maintain Sewer Hose From Mini Jetters to Combination Units
11 a.m.	How to be Successful in the Cleaning/CCTV Business

GENERAL BUSINESS

8 a.m.	New Untapped Techniques to Capture Today's Customers
9:30 a.m.	10 Steps to Marketing Success
11 a.m.	Cloud Computing for Small Business and the Field Service Industry

SEWER COLLECTION & REHABILITATION 8 a.m. Chemical Grouts and Grouting Methods 9:30 a.m. Watch Your Assets - Remote Monitoring Can Save You Big Bucks

11 a.m. Lateral Connection Rehabilitation: Biggest Bang for the Rehabilitation Buck

SPANISH/ESPANOL

9:30 a.m. Floods in Mexico City

How to Overcome the Difficulties of Doing Business in South America

WEDNESDAY TRACKS

FEBRUARY 27TH, 2013

SEWER COLLECTION & REHABILITATION8 a.m.9:30 a.m.11 a.m.Penn State University Performs Manhole-to-Manhole Lining In-House

GAS_OIL & MINING

8 a.m.	How to Decide What Dewatering Option is Best for You
9:30 a.m.	Blower 101: The Basic Operation of the Positive Displacement Blower
11 a.m.	Principles and Equipment of Hydro-Pneumatic Vacuum Excavation
GENERA	L BUSINESS

8 a.m.	Save Money — Move Your Business to the Cloud
9:30 a.m.	Morally Bankrupt
11 a.m.	Measuring Success Matters: Your Ads, Your Agents, Your Technicians

MUNICIPAL

8 a.m.Benefits of Digital Side Scanning Inspection Camera Systems9:30 a.m.Application for Sewer and Storm Nozzles11 a.m.Grinder Pumps & Application

PORTABLE LIQUID WASTE

8 a.m.	A View from the Receiving End: Regulatory Challenges in FOG Programs
11 a.m.	Now You Smell Me, Now You Don't: Deodorants

NEW TECHNOLOGY

 9:30 a.m.
 New Technology for Locating Sewer Line Leaks

 11 a.m.
 Solve Decentralized System Malfunction Issues and Site Challenges

ADVANCED INSTALLER COURSE



Presenters: Jim Anderson and Dave Gustafson Sponsored by Onsite Installer and COLE Publishing

An all-day course detailing site planning and preparation

11 a.m.

NETWORKING & ENTERTAINMENT

etwork with your peers over a 25¢ tap beer and enjoy a private concert just for Pumper & Cleaner Expo attendees! The Tuesday Night Industry Appreciation Party is a must attend Expo event and it's included when you pre-register before January 25th, 2013!

Tuesday, February 26th

Doors Open: 4 p.m. 25¢ Tap Beer: . . . 5 - 7 p.m. Craig Morgan: . . . 7 p.m.

JW Marriott Hotel 3rd Floor • Grand Ballroom

2

Host Hotel JW Marriott



Attendees enjoying the live concert at last year's event







The Finest Name in Biological Products for Septic Systems, System Recovery, Odor Elimination and More...



Call Greg Toll Free at 1-800-326-7867 and ask about our Special Discounts & Free Freight!

Solving Problems, Naturally! **Ecological Laboratories** INC. TOLL FREE: 1-800-326-7867 • FAX: 516-823-3440 • EMAIL: info@propump.com Visit our web site at: www.propump.com

CHOICE INDUSTRIAL VACUUM EQUIPMENT ON THE MARKET

m

Thank you to all of our wonderful customers for your continued support and promoting our success. We wish you all a safe and HAPPY THANKSCIVING holiday!

PARTSEXPRESS

f B 🐻 P

GR

PUMPER PROFILE

Finding the Value



It's not enough for Brownie's Wastewater Solutions to collect multiple waste streams for customers. They want to identify a recycling use for everything they pump. By Scottie Dayton

hen old-line pumping company Brownie's Wastewater Solutions became a subsidiary of publicly held Freedom Environmental Services, the goal was to establish a one-stop wastehandling service company for restaurants, hotels and convention centers.

The Orlando, Fla., based Brownie's – in business since 1948 – has become a greatly diversified service provider over the past few years, doubling the customer accounts and making "recycling" the watchword in every move the company makes.

In 2010, Brownie's acquired Vac and Jet, a municipal and industrial cleaning and treatment service. The company then purchased Grease Tec from Clean Fuels, a full-service cooking oil collection and rendering business, and rolled it into another Freedom subsidiary, Grease Recovery Solutions.

Within months, Brownie's grew from 25 employees with more than 1,000 commercial accounts to 43 employees with more than 2,500 commercial accounts, including Pepsi, a major entertainment park/resort, Coleman Federal Correction Complex,

(continued)

Florida



Technician Mike Hernandez cleans a new truck, a 2012 Freightliner built out with a 4,800-gallon aluminum tank from Progress Vactruck and a Masport pump. (Photos by Scott Cook) Brownie's Wastewater Solutions, a subsidiary of Freedom Environmental Services, Orlando, Fla.

FOUNDED: 1948 Employees: 43 Service Area: Florida

SERVICES: Commercial and residential septic and grease services, drainfield installations and repairs, sewer and drain cleaning, waterjetting **AFFILIATIONS:** Florida Industrial Pretreatment Association, Florida Restaurant and Lodging Association, Cooking Oil Recycling Effort (CORE) **WEBSITE:** www.freedomwaterservices.com

YEARS AND GOING STRO

POLYPORTABLES' TOILETS ARE BUILT FOR THE LONG HAUL

1-800-734-4891

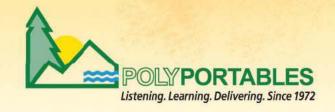
That's why we have a love-hate relationship with them. We love them because they last so long. We hate them for the same reason. All PolyPortables' toilets are built for the long haul. (Always will be.) You can only imagine how many weddings, music festivals, park & rec seasons, backyard parties and boiling summer days on construction sites this

* We often see older units in action. However, this was one unit that could be given the day off for a photo shoot.

Jon's Johns unit has seen. And marvel at how many more it can handle.

USE YOUR BLUEBUCKS ON ANY POLYPORTABLES PRODUCT

You can build a business with us.



PORTABLE TOILETS • HANDWASH STATIONS • DEODORIZERS • CLEANERS • TRUCKS 99 Crafton Drive, Dahlonega, GA 30533 USA • Phone (800) 241-7951 or (706) 864-3776 • Fax (706) 864-8111 • www.polyportables.com

All Green Way Products' deodorizers, cleaners and air fresheners are high-performance products developed and manufactured in our facilities in Dahlonega, Georgia specifically for portable restroom operators. They are all environmentally safe.

Green Way Products

Oil is managed in a series of storage tanks at the company facility. Here Mike Hernandez walks across a catwalk while checking the tanks.

and utility companies such as Toho Water Authority. Revenue increased from \$293,000 in 2009 to \$6 million in 2011. "We were rocking and rolling," says operations manager Rafael Benitez. That had not always been the case.

ADAPT, OVERCOME

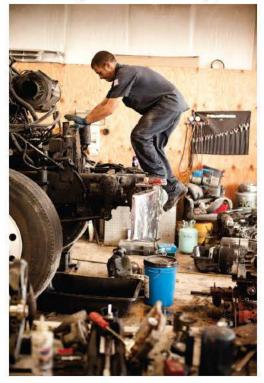
In 2008, financial difficulties threatened Brownie's existence. To survive, the company adjusted payroll and refocused its core businesses: restaurant services, septic tank cleaning and vacuum loading. A manager was hired for each department: Danny Floyd, regional sales for Grease Recovery Solutions; Mike Gignac, plumbing; Tammy



Steen, Grease Recovery Solutions; Monica Swearingen, business; and Steve Catania, lift station. Today, commercial, industrial and municipal customers account for 60 percent of the company's revenue, and residential the remainder.

Brownie's had pumped septic tanks and grease traps since its inception, but adapting to cooking oil customers took a while. Making certain they were serviced correctly was challenging due to rapid turnover in the restaurant and hospitality industry. "How we care for customers is a major selling point," Floyd says. "We build face-to-face relationships that are very important to us, and each turnover set that effort back a little."

Bolstering those new relationships, a sales team went after diverse



work, including drain cleaning, plumbing and waterjetting. Most customers welcomed vendor consolidation, especially after hearing that Brownie's had no overtime, after-hours or trip charges. "We work around the clock throughout the year, enabling us to charge our normal hourly rate plus materials," Floyd says.

Mechanic Pedro Navarro services a Moro PM100T vacuum pump in the company shop. We designed the grease rendering system as one unit. The brown grease process is on the left, the yellow grease process is on the right, and the boiler and generator are in the middle.

- Danny Floyd

EQUIPMENT CHOICES

At the time Brownie's purchased Clean Fuels, the company was moving to an 8,000-square-foot warehouse with office, and had yet to hook up any equipment. The Orange County Health Department saw only a new business that needed permitting. One requirement was to build a 16- by 16-foot containment pad with retaining walls and drainage area to capture spills or tank ruptures.

"We designed the grease rendering system as one unit," Floyd says. "The brown grease process is on the left, the yellow grease process is on the right and the boiler and generator are in the middle." Grease Recovery Solutions opened in February 2011.

Brownie's 15 vacuum trucks and four 6,200-gallon stainless steel Model L-7035 tractor-trailer tankers, built by Walker Trailers, deliver grease trap waste and cooking oils to the plant. The latest addition to the vacuum fleet is a 2012 Freightliner with 4,800-gallon aluminum Progress Vactruck, heated collars, Masport VTK-650 pump, and 350 cfm forced-fan air-cooled rotary vane pump. The majority of the other vehicles, built by Presvac Systems, are 1999 to 2003 Powervac PV-4200s on Freightliner, International and Sterling chassis with 4,000-gallon aluminum tanks and Masport pumps.

Most trucks also have 622S Harben jetters (4.5 gpm/4,000 psi) because the city and surrounding areas require grease traps and interceptors to be pressure washed after pump-out. (Orlando alone has more than 4,500 restaurants and more than 450 hotels, most on a 90-day service schedule.) As a complimentary service, Brownie's pressure washes customers' aboveground collection containers and the site monthly.



efuse Systems



rushrefusesystems.com



When it comes to pumper trucks, no one offers you more.

SERVICE | PARTS | COLLISION CENTER | NEW AND PRE-OWNED SALES | FINANCING | LEASING | RENTAL



Peterbilt Model 348 Standard with 3600 Gallon Vacuum Trucks

Automatics and standards in stock. Non-code 3600 gallon, Pik-Rite tank. Masport HXL400WV liquid cooled pump, aluminum hose trays. 10 yr tank war-ranty standard. Tank options can be added before delivery. **Call for pricing.**



Peterbilt Models 365 and 388 with 110 BBL 4700 Gallon Water Trucks

All triaxle, MX 485HP and Cummins ISX15 500 HP engines, 8LL and 18-speed transmissions and Peterbilt Air Trac suspension. Tank options can be added before delivery. **Call for pricing**.



Peterbilt Model 348 with 4000 Gallon Aluminum Vacuum Tank

Automatic or standard transmission. 4000 gallon Imperial aluminum tank. Liquid cooled pump. Aluminum hose trays. Tank options can be added before delivery. Two stage engine brake included. **Call for pricing.**

877-661-4511

Refuse Sales Team: Gregg Wilkinson | Jason Guzauskas | Jesse Fullilove | Hal Holloway | Alex Drabant | Ryan Hindt refusesales@rush-enterprises.com | 8810 IH-10 East | San Antonio, TX 78219 "Employees dump oil at night and it flies all over," Floyd says. "Cleaning the area prevents slips and falls. It's important to provide a safe environment for our customers and our technicians." The cleaning crew drives a Ford F-450 pickup truck with lift gate carrying degreaser, a Steam Genie heated pressure washer from Alkota, and a 500-gallon tank from Dyna-Vac Equipment to handle the dirty water.

PROCESSING GREASE

Trucks arriving at the rendering facility offload into separate screening boxes to catch debris. Cooking oil then flows to one of two 20,000-gallon settling/mixing tanks. When a batch is ready for rendering, it is piped to a 15,000-gallon tank with inline heaters and thermostats. The liquid that rises to the surface is No. 1 grade yellow grease, while the unusable fines settle to the bottom and are siphoned off.

A proprietary press dewaters the fines. Water then flows through a chemical treatment process using Alar Engineering Corp. equipment to disinfect it before being stored in two 7,500-gallon tanks. Technicians test the water continually to ensure that it meets reuse standards.

Technician Jean Sylsaint pumps a septic tank at a home in Orlando, Fla. His truck is a 1996 Ford Aeromax with a Moro pump and a 4,000-gallon tank.



No answering machine here

Several years ago, the folks at Brownie's Wastewater Solutions in Orlando, Fla., were convinced Internet searches were shifting from computer-based to smartphones, and the company wanted to reach the mobile market. So Brownie's turned to online marketing company ReachLocal.

"I believe Brownie's was one of the first companies in the area to become involved with online marketing," says business manager Monica Swearingen. "The results have been outstanding. We average 200 to 300 calls per month."

ReachLocal developed a Web presence strategy, built a marketing campaign, and tracked results. The technology works in the background of major search engines, listing Brownie's first when people search terms such as "septic," "plumbing," "toilet backup" or "grease."

"ReachLocal comes in with all our monthly figures and records every phone call," Swearingen says. "We pride ourselves on customer service, and it begins as soon as we answer the phone."

Managers listen to the recordings to evaluate how staff respond to customers. Employees with years of experience are on the phones to assist and troubleshoot. "When customers call Brownie's, they never listen to a menu," Swearingen says. "They hear a person say hello." Employees dump oil at night and it flies all over. Cleaning the area prevents slips and falls. It's important to provide a safe environment for our customers and our technicians.

- Danny Floyd

"We haven't begun to recycle it because we're still looking for applications," Floyd says. "Some outlets under consideration are concrete batching plants, dust control at construction sites, and landscape and agricultural irrigation. Customers can haul the water away for free or we'll deliver it for a fee."

It takes 9,000 gallons of cooking oil to produce 6,000 gallons of No. 1 grade yellow grease. The facility processes one million gallons per year, but has capacity for 3.3 million gallons.

Brownie's fabricated its own processing components for grease trap waste, which is mostly water. After screening the grease, it is pumped to two 20,000-gallon mixing tanks that heat it to 180 degrees, separating it from the water. The oil, piped to the boiler, is reheated to separate residual water, then stored in tanks until there is enough to sell. The process produces 250,000 gpd of water, which flows through the Alar system and into the 7,500-gallon storage tanks.

The operation, running at 80 percent of design capacity, produces 10 million gallons of oil per year. Both types of oil are sold to commodities brokers for resale as renewable energy or livestock feed. "We can't produce enough to meet demand," Floyd says. "The grease is sold before we even cook it."

Local municipalities experimenting with biosolids and recycled oil as fuel are another market for the product. "They're buying No. 1 grade yellow grease in 100-gallon increments," Floyd says. "Although still in the beginning stages, the experiment is working well and has great potential."

ADDED SERVICE

Resorts, conference hotels, and large restaurants often have infrastructure for transporting grease to collection points. Cleaning the infrastructure is part of Brownie's one-stop service package. One major customer, a theme/resort in central Florida, has 54 traps holding 40 to 12,000 gallons and four lift stations.

"We remove 1 million gallons of brown grease annually," Benitez says. "Every 14 days, crews pressure wash the grease lines in the busiest area of the park. We also jet the complex's 34,213 feet of 8- to 24-inch ductile iron and PVC sanitary sewers annually, and the stormwater conveyance system as needed."

Brownie's built its own inspection truck, then outfitted it with CUES equipment. Jetting crews use 2007 and 2008 Vactor 2100 series combination sewer cleaners built on International chassis with 15-cubic-yard debris bodies, 1,500-gallon water tanks, 4,500 cfm/18-inches Hg Dresser Roots (now GE Water & Process Technologies) positive displacement blowers, and 80 gpm/2,000 psi waterjetting systems.

If access is a problem, they use trailer-mounted 600-gallon hydrojetters from Harben and US Jetting. Ford F-450 pickups with hydraulic hoists enable them to pull or install pumps and rails in lift stations. There also is a fleet of plumbing vehicles to repair those problems. Mike Hernandez checks the level of oil kept in storage tanks at the Brownie's facility.

FORWARD THINKING

With Grease Recovery Solutions running smoothly, the company is concentrating on recycling septage. Haulers currently deliver it to Ag Environmental Solutions in Fort Meade for dewatering and land application or landfilling.

"We're working with the Florida Industrial Pretreatment Association to learn new techniques to dewater septage and produce Class A biosolids for fertilizer," Floyd says. "Our goal is to produce Class A EQS, which is exceptional quality sludge, and maybe add a septage receiving facility to our operations."

In 2010, the pretreatment association launched CORE, its cooking oil recycling effort designed to reduce sewer overflows. As a CORE sponsor, Brownie's occasionally covers the cost of association workshop lunches or networking meetings, or gives presentations on its grease recovery program.

Grease Recovery Solutions also works with the City of Orlando and Orange County officials, encouraging homeowners to recycle their cooking oil instead of pouring it down the drain. "Whenever technicians respond to residential service calls, they discuss the issue and leave pamphlets," Floyd says.

Within five years, they would like Brownie's to stop taking waste to the landfill, end land application, reuse all waste byproducts and grow the cooking oil operation by acquiring larger accounts.

"Although we're very busy, I see the potential to realize different techniques and continue expanding," Floyd says. ■





Harben, Inc.

800/327-5387

Masport, Inc.

800/228-4510

(See ad page 3)

Moro USA. Inc.

www.morousa.com

800/383-6304

(See ad page 7)

www.harben.com

MORE INFO

Alar Engineering Corp. 708/479-6100 www.alarcorp.com

CUES 800/327-7791 www.cuesinc.com

Dyna-Vac Equipment 888/298-8668 www.dynavacequipment.com

- GE Water & Process Technologies 866/439-2837 www.gewater.com
 - ww.gewater.cor

Progress Vactruck 800/467-5600 www.progressvactruck.com (See ad pages 10, 11)

US Jetting, LLC 800/538-8464 www.usjetting.com

Vactor Manufacturing 800/627-3171 www.vactor.com

Presvac Systems, Ltd. 800/387-7763 www.presvac.com (See ad page 100)

www.masportpump.com



Buy with **Confidence** from the Leaders in Vacuum

vacutrux.com

1.800.305.4305



NGEST LASTING THE **FNT** AVAILABLE TODAY



AVAILABLE NOW:

STANDARD OR CUSTOM BUILD

 Brass Valves Camlock Fittings Vacuum Hose

 Vacuum Pumps Tank Components Parts + Tools



Available online at: www.vacutrux.com

Maximum Service, Maximum Value for the Liquid Waste Industry

Canada/U.S.A. • Toll Free

7am - 5pm EST • Mon-Fri VISA International: 1.519.669.1625



EXPL

We Have Your Size...1 to 24

Explorer's full line of Transporter Trailers means we have a solution that suits you.

NEW 1 or 2 toilet Transite Trailers with steps, stabilizers and removable tongue.

explorertrailers.com

Built Tough - No Worries!

Transport safely by directly clamping each toilet skid to the carrier slats.

Flexibility to haul many styles of toilets, including ADA and specialty.

A Great Finish.

Hot dip galvanizing for 100% corrosion protection, or quality finish coatings in your company colors.

Call Today!

Explore the Finest in Sanitation!

Many Trailers & Sizes In Stock Now...

Crossfield, AB Grosse Isle, MB Minneapolis, MN Golden, CO Portola, CA Apopka, FL Jacksonville, TX

Ted Hoover King's Site Service Satellite Industries **Columbia Sanitary Plumas Sanitation** Steve Baie Ent. Tom Woyt

(866) 587-7262
(204) 467-9010
(800) 328-3332
(303) 526-5370
(530) 832-0370
(386) 265-1973
(903) 586-6493

1-866-457-5425

Manufactured in Ontario, Canada by McKee Technologies



Image is everything. Protect it with Graffix.

- biodegradable
- neutral scent
- ·soy-based formula
- •no harsh fumes
- thick formula prevents dripping & streaking

877.ROI.PAYS (877.764.7297) / safetfresh.com





Take a Stand Against Flushing Pharmaceuticals



Pumpers can play a critical consumer education role in the battle to keep trace amounts of prescription drugs out of the waste stream

By Ken Wysocky

Pharmaceutical-drug contamination of groundwater, rivers, lakes and other waterways is a growing problem as millions of Americans flush unused or expired medications down toilets or discharge them in body waste. Throw in additional discharges by healthcare facilities, and it's no wonder that researchers have identified traces of pharmaceutical drugs in the drinking-water supplies of 40 million Americans.

To understand the scope of this problem, consider the following statistics released by the U.S. Centers for Disease Control and Prevention (CDC): From 1998 to 2008, the number of Americans taking at least one prescription drug in the past month increased from 44 to 48 percent. The use of two or more drugs increased from 25 to 31 percent. The use of five or more drugs rose from 6 to 11 percent.



Moreover, in 2007 and 2008, one out of every five children and nine out of 10 older Americans reported using at least one prescription drug in the past month. By anyone's standards, that's a lot of medications – and they're all drugs septic systems and sewage treatment plants were never designed to treat.

What does this mean for septic-system pumpers? Plenty, according to Adrienne Esposito, the executive director of Citizens Campaign for the Environment, a New York City-based not-for-profit group that works to protect public health and natural resources. Here's her take on the problem, and how pumpers can be part of the solution:

Pumper: When did this problem emerge?

Esposito: In 1999 and 2000, the United States Geological Survey (USGS) looked at surface waters in rivers and streams. It found 80 percent of the rivers and streams tested contained low levels of pharmaceutical drugs, such as antibiotics – that's the big one – as well as hormones and steroids. That was a big wakeup call for America. It was long suspected, but that was the first time the government did such testing.

Pumper: Characterize the scope of the problem.

Esposito: We're finding these materials in low levels in waterways across the nation. The concern is that it's such an unknown. It raises some medical concerns, such as (increased) antibiotic resistance and hormone disruption. For instance, what if you're ingesting hormonal drugs, but don't need them, what is the impact? It might disrupt hormonal development in ways we don't yet understand. And what are the synergistic effects of getting a combination of low-dose drugs you don't need? It's all unknown. But the bottom line is that constant, low-level exposure of pharmaceutical drugs may have impacts on humans.

Pumper: Do any studies back up these contentions?

Esposito: A recent Stony Brook Institute study of Jamaica Bay, a famous wildlife refuge in (the New York City borough of) Queens, looked at treated sewage effluent and its effects on marine life – specifically winter flounder. It found that in Jamaica Bay, flounder are experiencing feminization. The ratio of females to males is 10:1. Normally it's closer to 50/50. Why? The study's author found compounds from pharmaceuticals are disrupting hormone activities.

And in Suffolk County in eastern Long Island, the USGS and county health department officials took 70 groundwater samples about five years ago, and 28 of them contained pharmaceuticals, with most containing more than one. Most common were anti-epileptic drugs and common antibiotics.

In addition, sewage plants aren't designed – nor do we have the technology yet – to filter out these drugs. People who think there's a safety net are gravely mistaken.

Pumper: If it's only trace amounts, why is it a big deal?

Esposito: Today, it may be only trace amounts, but tomorrow, who knows? Ignorance isn't bliss, in this case – ignorance is dangerous. If you're mixing baby formula with water, you only want water in there, not Lipitor or contraceptives. When I make my morning honey and tea, that's all I want in there, not Viagra. If I'm making a choice (to take medications), that's one thing. If not, it's quite another story.

Pumper: We've heard anecdotal stories from septic system maintainers saying pharmaceuticals make bacteria less effective in the tank, which has a detrimental impact on the system. Is there evidence to prove this?

Esposito: Nobody knows the answer to that. It's an emerging issue.

Pumper: What steps has the U.S Food and Drug Administration (FDA) taken to curb this problem?

Esposito: There's been no real action. We had to dig to find even guidance documents that advise Americans how to dispose of unused drugs. We can't do much about drugs that pass through the human body. But there's one issue we can address immediately: Require the safe disposal of pharmaceuticals, as well as do more public education about not flushing unwanted drugs.

Pumper: How should people dispose of medications?

Esposito: The FDA recommends incineration. Some New York municipalities are setting up drop-off areas or holding drop-off-drugs days (similar to hazardous-waste disposal days). You need a police presence because some drugs are narcotics based ... it gets complicated. You can't just bring them to a pharmacist because you need a chain of control.

As part of Operation Medicine Cabinet, Suffolk County offers drop-off lock boxes at each police precinct. They're accessible 24/7 because precincts are open all the time. When the box fills up, police take it to an incinerator. It's been very convenient and well used by the public. In the first four months, more than 800 pounds of drugs were collected, then burned at a local incinerator.

And in Suffolk County, all healthcare facilities – hospitals, hospices, nursing homes and long-term care facilities – are required by law to annually submit plans for safe disposal of unused and/or expired medications.

(Visit www.fda.gov/ForConsumers/ConsumerUpdates/ucm101653.htm for more information about FDA drug-disposal guidelines.)

Pumper: What can septic service operators do about the problem?

Esposito: The best thing they can do is educate their customers. We're not advocating that people stop taking prescription drugs, but we don't want them to throw them down the toilet.

Pumpers could develop a simple brochure or flier and distribute it to customers. They could be wonderful partners in public education. Pumpers have a lot of good one-on-one contact with members of the public and great knowledge about this issue, and would be a very meaningful partner. Pumpers could be wonderful partners in public education. Pumpers have a lot of good one-on-one contact with members of the public and great knowledge about this issue, and would be a very meaningful partner.

- Adrienne Esposito

Pumper: Where can they obtain information about the issue to develop a simple education program?

Esposito: They could get information from our website: *www. citizenscampaign.org* and type in "pharmaceutical disposal" in the search field. There doesn't have to be a big cost involved. People instinctively know they shouldn't flush them, but they're not always sure. So if we could reinforce that instinct with education, we could really make a difference.

Pumper: Could doing this enhance a pumper's community standing and differentiate them from competitors?

Esposito: I think it would illustrate that pumpers also are caretakers of the water supply and public health. It would upgrade them into being a green business, which could provide a competitive advantage. You can't underestimate peoples' values and their interest in protecting their community. I think people would see (an education program) as a meaningful contribution to protecting the things they love: their families and their world.

Pumper: What else could septic pumpers do to be advocates on this issue?

Esposito: They could be a source for a local newspaper story, or partner with a local advocate group or community health department. Any substantive contribution to educating the public about this health problem will help – before it becomes a crisis.

Pumper: Have you heard any individual septic-system contractors or related professional associations taking any action on public education?

Esposito: No – this article would be the first. But we're looking for the first one to step up and become a leader on the issue.





Strong. Experienced. Worldwide.

Azmal

ARMAL INC. 122 Hudson Industrial Drive Griffin, GA 30224 USA Phone +1 770.491.6410 Fax +1 770.491.9458 Toll free 866.873.7796 www.armal.biz armal-inc@armal.biz

STOP GREASE THIEVES! Is VOUR MONEY ENVIROTUB Trease storage Reinvented Can helpyou KEEP II

"Grease Storage Reinvented" Your customers will love it!

Fits under 2 & 3 Compartment Sinks

Dump oil safely at the fryer

The #1 tub of choice by pumpers nationwide!

- No More Dumping Hot Oil Outside
- No Foul Odors
- Non Marking Polyurethane Wheels
- Eliminates Grease Theft

- Perfect for: • Small Kitchens • Malls
- Food Courts
- Stadiums

(866) 777-4322

"Grease Storage Reinvented" www.envirotub.com • (866

64 Pumper • November 2012

www.e





EXPERTISE

TECHNOLOGY

RESPONSIBILITY



Flex Your Muscles

What if we told you that we could offer even more flexibility to our Vac-Con product line by increasing the mobility, reach and flexibility of our telescopic boom? We have done just that with the Vac-Con Power Flex Boom! The new Power Flex Boom extends up to 28.5 ft. from the machine and rotates up to 315 degrees. On top of that, the boom articulates up to 110 degrees and will lift up to 34 ft. into the air.

This new feature, that can be mounted on a Vac-Con combination sewer cleaner, X-Cavator™ and industrial machine, truly illustrates the expertise of the innovative Vac-Con team. Are you ready to *flex* your muscles?

To learn more about the Vac-Con Power Flex Boom, go to our website at Vac-Con.com Scan the QR Code to view a short product demonstration video!

A HOLDEN CINDUSTRIES Company

GSA U.S. General Services Administration



969 Hall Park Road * Green Cove Springs, FL 32043 * Tel: 904-284-4200 * Fax: 904-284-3305 * vns@vac-con.com Vac-Con is a subsidiary of Holden Industries, Inc., a 100% employee-owned company.

Time to Hire?

A poster would like to add a service technician. Industry veterans weigh in with the pros and cons of bringing on a new employee.

This feature in Pumper reports noteworthy conversations that take place at the Pumper Discussion Forum, an online forum for industry professionals found at www.pumper.com. Pumper Discussion enables exchange of information and ideas on septic and drainfield installation and maintenance, trucks and equipment, portable sanitation, chemical and additives and much more.

Information and advice in Overheard Online is offered in good faith by industry professionals. However, readers should consult in depth with appropriate industry sources before applying such advice to a specific business situation.

QUESTION:

I'm interested in hiring a driver, but wonder how to go about putting them on the books? I have many concerns, such as letting someone go out on their own and risk my reputation. No matter who you hire, they will not do as good a job as the company owner will. They come in to do their hours and go home. They beat equipment and lose tools. What do you do on days when jobs are slow? A competitor of mine got out of septic pumping because he said after all is said and done, there isn't enough money in septic tank cleaning alone. Some days you can have anywhere from four to 10 pumps, some days one or two, and some days none. Is it better to stay small or go bigger?

ANSWERS:

The small company I worked for had three trucks. When we were slow, we washed the trucks and greased them, etc., for the day. Or we put two drivers in one truck for the day to speed things up. Most of the time he had the work. But every once in a while we would get a slow day. But he would never send us home; we always got 40 hours a week.



What was starting pay? Did you guys have benefits? I don't see how it's possible to turn much of a profit with dumping, maintenance, fuel, advertising, payroll, insurance and unforeseen expenses.

* * *

I started at \$17.50 per hour, and when I left three years later I was earning \$19.10 per hour. We had paid holidays, sick days and one week of vacation. He did have health insurance benefits. It wasn't the greatest plan, but it was free. Also if you were on call for the week, you got an extra \$75 in your check. Plus he had uniforms so we didn't have to get our own clothes messed up. Overall it was a good small family-owned company to work for.

Back in the day, he was at \$195 per pump-out up to 1,250 gallons. Dumping fees were 1.2 cents a gallon. We did six to 10 tanks a day and then had a couple holding tanks, grease traps or package plants we would pump. Each truck did two to three tanks a day.

I have only three employees in the septic service part of my business. The low guy on the totem pole works three days a week and cleans equipment. I pay him a flat \$350 per week. I have another flat-rate employee who rides shotgun on a truck and also does mechanic work for me. He gets \$550.

I know some guys don't believe it, but every truck needs two people on it. My wife and I run a truck. One person does the initial talking and paperwork and the other mostly does the work. Two people per truck can by far outrun the profits of one-man trucks.

Trust is the first and major issue. They absolutely must be trustworthy. But you still draw up a non-compete agreement. Last but certainly not least you have to pay them enough to keep them.

The trick is the person you're talking about has to be able to really perform. Trust is the first and major issue. They absolutely must be trustworthy. But you still draw up a non-compete agreement. Last but certainly not least you have to pay them enough to keep them.

In my opinion, the only answer is commission. The young man I have in this position started working for me when he was in high school and has been with me more than 12 years. His pay is calculated after deducting the disposal fees from the job and I pay him 30 percent of what's left. He has consistently done better every year. For the last two years, he made \$100,000. I know that's a lot of money, but he is worth it and he's not going anywhere.

I was told a long time ago: "If you pay peanuts, you get monkeys." Good people make or break a business.



CALL TO ORDER TOLL FREE 866-872-1224 • www.varcopumper.com

11P12





Choose RIV Quality valves for YOUR Pumper Iruck Call today to find the distributor in your area:

1-800-801-6663 www.elmiramachine.com Distributor Inquires Welcome

tank The Best Place for Tanks

visit www.kentuckytank.com/pumper

Pro Pumper 250 Low Profile Holding Tank

- 16" x 46" x 93.5" with 250gal Capacity.
- Interlocking/Stackable for easy shipping and in-lot handling
- In-Mold fork lift skids NO pallet required!
- In-Mold handle makes positioning and pumping easy.
- One 10" pump out lid with steel tether included
- 7 Threaded Inlet Fittings
- · Can be heated we carry approved heaters
- Patent Pending
- 16 Available Colors

Pro Pumper 250 kentuckytank.com 1.888.4KY.TANK



ON THE GROUND.



2012 International 7600 390 HP, 10 spd. 4800 Gal. Aluminum, NVE 866 Max Pack



2012 Ford F750 / 2800 Aluminum Septic 6 speed , Jurop RV360, toolbox each side.

IMMEDIATE Delivery.

TST112PMR



- > Several different styles of heat-treated hooks are available
- > Top Poppers are great to open manhole covers
- > The Handy Hooks allow two handed use

- > Insulated, standard, and specialty soil probes
- > Metal shaft sizes: 3/8" round, 3/8" hex, or 7/16" hex > Replaceable tips are threaded on and hardened
- > A "slide" allows the handle to pound the shaft into the ground

Going Green and Getting Greenbacks



David is a freelance business writer in Racine, Wis.

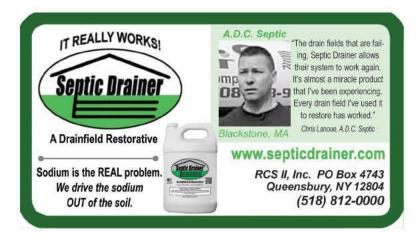
Sustainability isn't just a buzzword used by environmentalists. It applies to reducing your energy costs, lowering your overhead and boosting your profits.

By David Steinkraus

This is the beginning of a season of planning for many pumpers. The chill and rain or cold and snow of winter are arriving, and business may be slowing with the weather. Part of that planning process may involve updating or adding on to your business building, or constructing a new office and garage space. And when you think of construction issues, think energy efficiency.

You don't have to be a dyed-green activist to appreciate some ideas accompanying the public discussion about renewable energy resources. All you need is that monthly reminder sent by your utility company. The good news is it may not require much for you to refresh or erect a structure that will put green in another good place: your wallet.

Whether you are remodeling, building new or expanding, there are some general rules to be efficient and save money. One is to be careful of



We own the name. You've <mark>earned</mark> the name.



budget creep. This doesn't mean overall budget. It means not becoming so attached to one idea that you make unwise cuts to keep the total budget under control.

Here's one architect's story that serves as a helpful example. The owner of a new commercial building wanted a curtain wall. It was a \$100,000 expense, and the architect could have produced the same effect for less cost. But the owner insisted on the design he had in mind and cut away \$30,000 and \$40,000 items to pay for it. Consider what that may have cost – better windows or a better ventilation system, which could have cut his operating expenses for the next 20 to 30 years.

You don't have to be a dyed-green activist to appreciate some ideas accompanying the public discussion about renewable energy resources. All you need is that monthly reminder sent by your utility company. The good news is it may not require much for you to refresh or erect a structure that will put green in another good place: your wallet.

BACK TO BASICS

Options for energy efficiency can be overwhelming, but the basics still apply, says architect Tom Brown of Stevens Point, Wis. His rules are simple: Insulate the building well, point it in the right direction, and then worry about how to heat and cool it.

Insulation is cheap, he says, and a well-insulated building will be much easier to keep warm or cool. He's a fan of blown-in insulation because it fills every nook, unlike fiberglass bats unless they are installed carefully.

The other part of his idea – pointing in the right direction – has to do with the sun. West-facing windows add heat during the afternoon – bad for buildings in the Southwest. For people in cold climates, north-facing windows promote heat loss. Proper windows can counteract both problems.

Manufacturers now produce windows with glass that has different degrees of infrared reflectivity, Brown says. Infrared radiation is heat, so this modern glass will let sunlight in but not all the heat. In the Southwest you need glass with high-infrared reflectivity to keep the sun's heat out. In colder climates, high-reflectivity glass on the north and west faces keeps heat inside during the winter and out in summer. On the south face you put low-reflectivity glass. In the winter the sun will help warm the building, and in the summer a shade will block seasonal heat.



LIGHT THE WAY

With insulation and windows addressed, you can think about heating, and Brown says you may not have to think hard. A properly oriented, wellinsulated building may not need very-high-efficiency heating and cooling equipment. You may still buy it to cut your operating cost, but your payback period will be longer.

Brown puts it this way: You will pay annual operating costs over and over, and by comparison the initial cost of building in extra insulation or better windows is very small.

Some experts say it's possible today to have a building that, over the course of a year, produces as much energy as it consumes. But like any general statement that comes with qualifications. Such buildings may be offices or warehouses that don't require a great deal of electric power. Your zero-energy building won't be one if you intend to run an arc welder.

Lighting is another major component of your energy costs. About 20 percent of all energy used in commercial buildings is for lighting, according to the federal Energy Information Administration. In those buildings big fluorescent lights are still king, and we know they're not the most efficient. Compact fluorescents and the newer LED lights produce more light per watt of input.

There is more to lighting than just bulbs.

Motion-sensing switches can turn lights on only when someone is in a space.

Clustering activities – putting your grinder next to the workbench instead of by itself in a corner, for example – means you can concentrate bright lighting in one spot.

Think daylight. Skylights, light pipes, and light-colored walls and ceilings will maximize your use of all the free light provided by the sun. Consider electric bulbs to be a supplement to sunshine.

NEED PROFESSIONAL HELP?

You may be wondering whether you need to hire an architect for this planning. Brown says not necessarily.

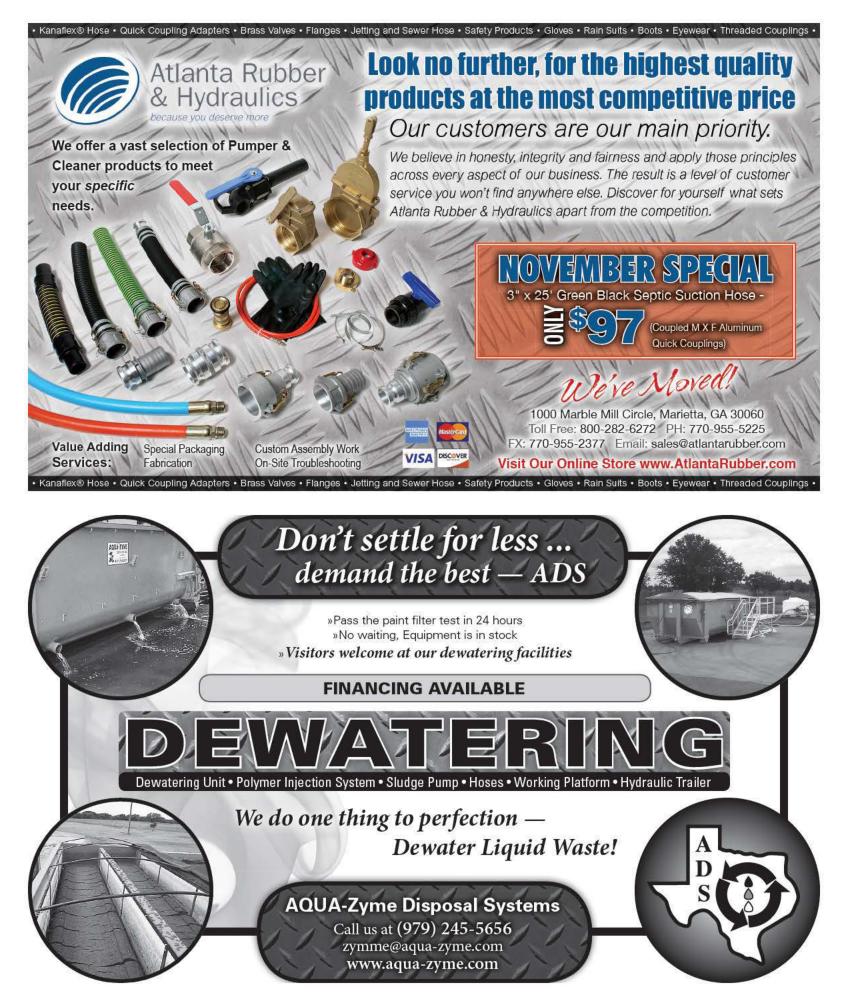
An architect will add 6 to 8 percent to the cost of your project on average, but for a smaller project Brown says you're better off spending the money on an energy audit. That will tell you where your existing building is leaking heat. A check of your local phone listings or an Internet search will reveal companies that perform audits. It is true they usually sell other services such as insulation, Brown says, but they also have good tools for examining the efficiency of your building.

He often requires a blower door test as the final exam for a building he has designed. The test consists of a big fan, which lowers the air pressure inside a building. You can walk around, hold your hand next to windows and electrical outlets, and literally feel the air leaks.

You may have heard of the LEED program, which stands for Leadership in Energy and Environmental Design. It is from the U.S. Green Building Council (www.usgbc.org) and it sets standards for energy-efficient and environmentally responsible buildings. You also may have seen or heard of projects certified as LEED Gold or LEED Platinum.

For a small project like a pumping contractor's shop, certification would not be worth the cost, Brown says. Yet the LEED standards can be a good guideline when you're considering construction.

Whatever you do in your project, don't ignore the marketing advantage of an environmentally sustainable design. In an industry that stresses keeping the environment clean, doing a green building project may get you bragging rights over your competition. And that could mean more green in your wallet.



• Engineering and Design Staff • Approval Prints Provided • Quality Manufacturing and Inspection

Experienced Sales Staff • After Sale Customer Service

ALL NEW MRK6000 6000/6300 CAPACITIES

Serving all your needs... Under one roof...

800-558-2945 www.imperialind.com

VISIT OUR WEBSITE FOR DETAILS ON STOCK UNITS

H

IMPERIAL INDUSTRIES INCORPORATED

INDUSTRIES INCORPORATED Jim Stieber - jim@imperialind.com Custom Septic & Grease Units 407/412 D.O.T. Units

Randy Tischendorf - randy@imperialind.com Portable Restroom Service Units Aluminum Trailer Units Septic & Grease Units

Carl Follie - carl@imperialind.com Portable Restrooms / Chemicals Wash Sinks Slide-In Units

COMMERCIAL WASTE UNITS • 407/412 D.O.T. UNITS • PORTABLE RESTROOM SERVICE UNITS TRAILER UNITS • PORTABLE RESTROOMS & SINKS • SELF CONTAINED UNITS



NAWT EXECUTIVE ADMINISTRATOR: Courtney Peterson

NAWT BOARD OF DIRECTORS:

Tom Frank, President, OH Jeff Rachlin, Vice President, PA Ralph Macchio, Treasurer, NY Tom Ferrero, Secretary, PA Roger Winter, Past President, ON Jim Anderson, MN Gene Bassett, NM Jace Ensor, NM Tim Frank, PA Larry Frost, ME Bill Hall, CT Stuart Mead, IN Tom Johnson, NY Kit Rosenfield, CA Arthur Joubert, NH Susan Ruehl, OH Bob Kendall, WI Mark Scott, MI Frank King, MA

PO Box 220, Three Lakes, WI 54562 • 1-800-236-NAWT (6298) • Fax 715-546-3786 • www.nawt.org

Join the 'New' NAWT for a Pre-Expo Course

By Courtney Peterson

f you are planning to attend the Pumper & Cleaner Environmental Expo International in Indianapolis next February, why not spend two days over the weekend attending one of the two pre-Expo workshops sponsored by NAWT? Consistent with our name change to the National Association of Wastewater Technicians, the classes emphasize the service connection. The inspection certification course will be offered, as it is every year, to anyone who would like to learn the NAWT standard for inspecting existing onsite systems. But we are excited to offer a course on the Principles of Septic System Design for the first time.

Over the years, NAWT has hosted a variety of courses during the two days leading to the Expo. The design principles course is the answer to numerous requests NAWT has received for such a program over the past year. Course content is from the perspective of what a service technician needs to know about design criteria. This will allow the technician to evaluate design plans so they understand why systems are installed a certain way, but also will help the service provider recognize potential problems that require their attention.

The first day of the course is in the classroom, discussing design principles. The second day is in the field, providing hands-on experience. You'll find out what impact the user has on system choices and design parameters. The most common mistakes are soils related, and the fundamentals will be taught to learn how to avoid these mistakes. System flow lines, sizing and layout, pumps, pressure distribution and advanced technology will be other topics of discussion.



Estimating hydraulic and organic loading from different types of users and how this impacts system design choice will be discussed and practiced in the field. Participants will go through a site evaluation process to understand how information gathered impacts the design process. Finally, the class will check the system layout in the field using basic surveying techniques. This course will not make you a practicing designer, but it will give you the ability to evaluate system plans and actual layouts, which as the technician caring for the system will be invaluable in troubleshooting problems and estimating what it will take for proper system maintenance.

Working with experts in the field and others in the industry, the course will give you a better understanding of design principles. With a combination of classroom and field visits, it is an ideal learning situation, including bookwork and hands-on interaction. If you are already NAWT-certified and need your CEUs, this will qualify for recertification.

Here is the lineup of NAWT seminars for the Feb. 25 Education Day at the Pumper & Cleaner Expo:

8–9 a.m. – Introduction to Pressure Distribution: Why Use Pressure Distribution? - Kit Rosefield

9:30-10:30 a.m. - Designing Systems, Boundaries and Barriers From a Soils Perspective - Jim Anderson

11 a.m.-noon - Pump Choices and Settings: Decisions for Proper Operation - Dave Gustafson

1:30–2:30 p.m. - Operation and Maintenance of Pressure Distribution Laterals - Bob Wright

3–4 p.m. – Installing With Management in Mind: How to Get the Most out of Your System - Dave Gustafson

4:30-5:30 p.m. - Introduction to Drip Distribution -Bob Wright

As an added bonus this year, there will be some special sessions on Tuesday morning, Feb. 26, of the Expo discussing DOT driver compliance issues and how to meet the 503 requirements for land application of septage.



KAIV

Series Blowers

(Truck Mount - Air Injection Cooling)



2 YEAR WARRANTY

Proven Reliability



Brudon Air Vac Ltd. is the exclusive North American distributor for the KAY International rotary lobe positive displacement vacuum blower line. Contact Brudon Air Vac Ltd. or your OEM builder of choice for sales, service & support on the KAY truck mount blower line. KAIV-310 850 CFM*

Email: sales@brudonairvac.ca

Phone: 780.440.1634 Fax: 780.466.4736

KAIV-322 2700 CFM* KAIV-340 3800 CFM* KAIV-3702 5300 CFM*

*Free Air CFM Rating @ 27" Hg Maximum Vacuum

Features:

27" Hg High Vacuum Power - Wet or Dry service
Pressure offloading capable

- Low pulsation Tri-Lobe impeller design
- Robust reinforced main housing Quiet operations
 Helical gears on drive side Higher input torque
- Large oil sumps for increased bearing lubrication
- Responsive dealers, warranty & service centers
 24/2 technical support & translation
- 24/7 technical support & troubleshooting
 On-hand inventory Highly competitive pricing
- Universal bolt-in footprint No retrofit required
 Long service life & low cost rebuild features



BRUDON Air Vac Ltd. 6510 30th Street Edmonton, AB T6P 1J6 Phone: 780.440.1634 Fax: 780.466.4736 Email: sales@brudonairvac.ca

www.brudonairvac.ca



Membership Benefits

- \$100 Off Training & Certification*
- One Free Admission to the 2013 Pumper Expo \$70 Value
- Free Annual Pumper Subscription
- 19% Off Verizon Wireless*
- Endorsed Property & Casualty Insurance
- National Representation & Industry Professionalism
- NAWT's National Training & Certificate Programs

More info at www.nawt.org "Certain restrictions apply. Badger VACUUM TRUCKS

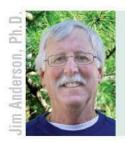
If you are looking for a vacuum truck and you want a

2013 Western Star

Cummins ISX 525 HP, 18 Speed, 20 front, 46 rear, 20 steerable pusher, 4700 gallon (110) barrel tank. Call for price

2005 Western Star Cat C15, 475HP, 9LL, 199,900 miles, 20 front, 20 pusher, 46 rear, <u>NEW 4700</u> gallon tank installed. Call for price





Jim is an emeritus professor at the University of Minnesota Department of Soil Water and Climate, education coordinator for the National Association of Wastewater Technicians, and recipient of the pumping industry's Ralph Macchio Lifetime Achievement Award. Email Jim questions about septic system maintenance and operation at editor@pumper.com.

Digging in the Dirt

Knowledge of soil shapes and textures will help you keep customers' onsite systems working at peak efficiency

By Jim Anderson

QUESTION: What are the soil factors used to determine the long term acceptance rate (LTAR) or soil-sizing factor?

ANSWER: This is one of the most common soils questions I hear. And specifically what is being asked is, "How can I identify soil texture, structure and consistence?"

The LTAR or soil-sizing factor is based on analysis of soil characteristics at the depth the soil treatment unit is installed. The factor is expressed in terms of gallons per day per square foot. Establishment of the LTARs is based on numerous research studies dating back as early as the 1950s evaluating acceptance rates of soils when septic tank effluent was applied.



On sandy soils, the rates were determined by what they could handle for treatment, as opposed to how much effluent the soils would accept. In the middle textures the rates related primarily to what happened when the biomat formed on the infiltrative surface, and for the clay textures by the amount of water that will infiltrate into the soil.

LTAR TABLES

During a number of studies, it was determined that the LTAR varied within similar textures if there was soil structure and it was strong enough to be maintained when water was added. This led a colleague of mine, Dr. Jerry Tyler, to work on a series of tables relating LTAR to soil characteristics and wastewater strengths. One abbreviated example is provided in an accompanying graphic.

Many states use some variation of these LTAR tables in their codes to define how large the systems should be based on soil type. The idea is that soil analysis based on texture, structure and consistence could replace – or at least reduce – the reliance on percolation tests and sizing by texture alone.

Texture	Loading Rate>30BOD Gal/day/square ft	Loading Rate<30BOD Gal/day/square ft
COS (Coarse Sand)	0.8	1.6
FS,VFS (Fine and very fine sand)	0.4	1.0
CSL,SL (Coarse sandy loam, sandy loam)	0.4	0.7
L (Loam)	0.0-0.6	0.0-0.8
SIL (Silt Loam)	0.0-0.6	0.0-0.8
SCL,CL,SICL (Sandy clay loam, clay loam, silty clay loam)	0.0-0.4	0.0-0.6
SC,C,SIC (Sandy clay, clay, silty clay)	0.0-0.2	0.0-0.3

Many states use some variation on these LTAR tables in their codes to define how large the systems should be based on soil type. The idea is that soil analysis based on texture, structure and consistence could replace – or at least reduce – the reliance on percolation tests and sizing by texture alone.

Minnesota is an example. Arizona has done this since the early 2000s and Colorado is considering adopting this approach.

To adequately evaluate soils requires the site evaluator/designer to have a working knowledge of soil characteristics and their identification in the field. This most often requires excavating multiple soil pits in the vicinity where the soil treatment system will be installed and making a detailed soil description including not only texture, structure and consistence, but also soil color and landscape position.

These methods of analysis also are provided as ASTM standard 5921: Standard Practice for Subsurface Site Characterization of Test Pits for Onsite Septic Systems, published by the American Society for Testing and Materials. I would caution everyone to use this standard with care, however, since there are some discrepancies and errors in the document.

The field procedure is to take a quantity of the soil and moisten the sample. Then based on how that sample holds together, how it feels and the length of ribbon that can be made will determine the soil texture class.

PARTICLE SHAPES

Soil structure is the arrangement of the individual soil particles in a shape. The size and way the structural units, or peds, are arranged affects both acceptance and treatment of wastewater. Structure is described by three characteristics: the grade or *expression* of structure, the size of the individual peds and the shape.

There are four grades: Grade 1 is weakly expressed; grade 2 and 3 are well expressed, and grade 0 is structureless. Structureless soils can be of two types: *loose*, reflected in sandy soils usually breaking down to the single sand grains, and *massive*, where the soil is coherent and does not break down to defined units. Well-structured soils will accept effluent more rapidly as well as conduct oxygen through the larger cracks and voids, which explains why there are differences in acceptance among textural classes.

Size of the peds ranges from very fine to very coarse. Soils with finer structure typically result in better water and air movement, and therefore better treatment. For the coarser-structured soils, these pathways let water move rapidly but may not allow time for treatment. Shapes can be granular, blocky, platy and prismatic.

To determine shape, size and grade of structure, take a sample of the horizon being described out of the pit wall on a shovel. The shape can be observed both on the shovel and in the pit face. The size is estimated by examining the peds on the shovel and estimating using a sizing table. The grade can be determined by bouncing the soil on the shovel. If more than half the peds fall apart into individual particles, the structure is weak; if it is about 50/50, then it is moderate, and if less than half, the grade is strong.

DRY OR MOIST

Consistence is a measure of how easy it is to break up soil. Consistence

is measured either dry or moist. The proper way to measure for comparison purposes is moist. This is because you can always moisten a dry sample but it is a longer process to dry a moist sample. Consistence measures range from loose and a term called *friable*, which means the peds break down easily, to very firm and rigid, which means the peds do not break down easily. Very firm and rigid consistence usually indicates the presence of significant clay particles in the sample.

This may sound intimidating and complicated. But if you ever have the chance to take a soil class, you will see that with a little practice and your already-considerable practical knowledge of soils in your area, you can become proficient at identifying these characteristics. A good reference source is to look at the soil descriptions for your area provided in the USDA soil surveys. This will put you in the right ballpark relative to your soils. You also can work with a professional soil scientist in your area. ■



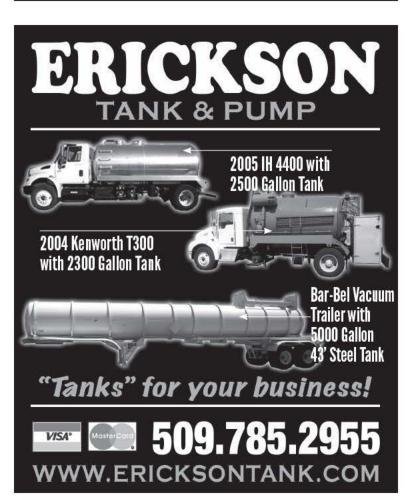


We Have Money To Loan Conserve your working capital. Keep existing credit lines intact, and enjoy the security of knowing financing is there when you need it. We offer loan and leasing plans tailored to individual needs. Portable Toilets Sewer Equipment Pumper Trucks • TV Inspection Water Jetters New and Used • Vacuum Trucks Equipment Programs offer longer terms for older equipment We do start ups 90 Day Delayed Billing Seasonal Payment Programs Available JIM THOMAS

We work hard to get our customer's credit approved. We have been involved in the environmental and liquid waste industry for over 35 years. We understand the competitive nature of your business and are prepared to act quickly. If you are having difficulty getting the Credit you need call Jim Thomas.

Toll-Free 877-333-4539 • JimThomas@KeyCommercial.com KEY COMMERCIAL CORP. Commerical Equipment Financing

www.keycommercial.com



Hannay Reels handle the toughest treatment.



You face severe conditions every day. We build custom reels that perform even in the harshest environments.

- Built to spec for washdown, jetting, pipeline inspection and more
- Heavy-duty design and construction
- Standard reels ship within a week

Let us solve your reel issues, so your crew can get back to business.

Find your reel solution: hannay.com or 877-467-3357



Hannay Reels[®] The reel leader.

DRUM FILLING VACUUM HEAD



Vacuum head used to intercept liquids or solids and contain it in a 55 gallon drum. Eliminates contaminating your truck on small jobs.





Pneumatic drum skimmers pick up oil & grease while operating off of your truck's air brakes.

www.elastec.com 1309 West Main, Carmi IL 62821 Tel: (618) 382-2525 Fax: (618) 382-3610 E-mail: elastec@elastec.com





POWER BOOSTER

Power Booster Sizes:

& 6 inch

New Release

3, 4,

Discover how over 30 years industry experience

and proven technology will increase your vacuum truck

performance. By providing limitless vertical lift and

distance capability, this unit will shorten project time.

pumping solution. Unsurpassed execution in highly

viscous applications.

Solid engineering coupled with rugged, lightweight construction make the Power Booster™ the ultimate

POWER BOOSTER™

Designed to increase the VERTICAL LIFT of liquid waste and sludge and eliminate long hose run obstacles.

PRODUCT USES:

Agriculture Construction Environmental Mining Municipal Waste Marine Onshore Drilling Offshore Drilling Offshore Drilling Sewer & Pipe Cleaning Proudly made in the USA

972.355.0550 • pressurelift.com See our video at www.PressureLift.com

CLASSY TRUCK OF THE MONTH

On-Site Sanitation LLC

ON-SITE SANITATION

740-393-118

Mount Vernon, Ohio

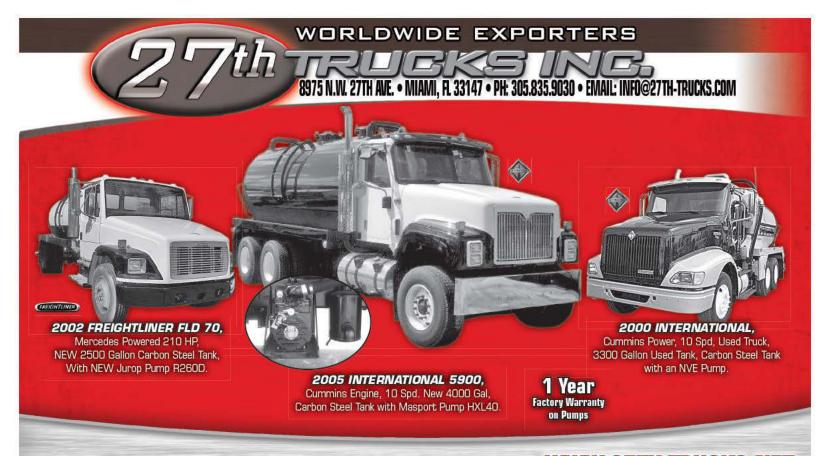


wher Chad Sims bought this Viper Red 2012 Peterbilt 337 rig as an exact match to a 2003 truck in the company's garage. The truck was purchased from Columbus Peterbilt and built out by Amthor International. The truck is powered by a PACCAR PX-8 300 hp engine tied to a Fuller 8LL transmission with a 4.11 rear end gear. The tank is a 2,400-gallon aluminum model with vacuum provided by a Fruitland RCF500 pump with the Eliminator package. The truck features a Garnet SeeLevel gauge with in-cab display, dual 3-inch inlet valves and a 4-inch discharge valve, all with heated collars. The truck carries 235 feet of hose from VAR Co., has two custom-built aluminum tool boxes, Alcoa Dura-Bright aluminum wheels, and LED signal and marker lights, strobes and rear work lights from Betts Industries Inc. Interior features include CB radio and Sirius satellite radio. Sims drives this truck daily for residential septic service. ■

SHOW US YOURS!

Got a truck with real WOW appeal? Show it off to *Pumper* readers! Send photos of your truck after it has been lettered with your company name. Any industry-related truck is acceptable. Please limit your submission to one truck only.

Your Classy Truck submission must include your name, company name, mailing address, phone number, and details about the truck, including tank size, cab/chassis information, pump information, the company that built the truck, and any other details you consider important. In particular, tell us what features of the truck help make your work life more efficient and more profitable. E-mail your materials to editor@pumper.com or mail to Editor, *Pumper*, P.O. Box 220, Three Lakes, WI 54562. We look forward to hearing from you!



Contact Alan @ 305-457-8058, David @ 786-236-9007, David Jr. @ 786-340-7759 WWW.27TH-TRUCKS.NET



INDUSTRY NEWS

Vac-Con launches municipal, contractor website

Vac-Con launched a new website (www.vac-con.com) for the municipal and contractor markets. The site includes product demonstrations, equipment photos and product information as well as dealer information pages.



Consolidated Fabricators partners with Impact Plastics

Consolidated Fabricators partnered with Impact Plastics to distribute its roll-off lids in California and Nevada.

WennSoft named to Microsoft President's Club

WennSoft was named to the 2012 Microsoft Dynamic President's Club for outstanding commitment to customer satisfaction. The President's Club recognizes partners who demonstrate dedication to delivering solutions that meet customer needs using Microsoft Dynamics products.

Dekker Vacuum acquires HullVac Pump

Vacuum equipment manufacturer and supplier Dekker Vacuum Technologies acquired HullVac Pump Corp. of Ivyland, Pa. Operations for HullVac, provider of rotary piston and vane pumps, will move to Dekker's corporate facilities in Michigan City, Ind.

LMK Enterprises adds investment partner

LMK Enterprises Inc. brought on an investing partner and formed a new operating entity, LMK Technologies LLC. The company looks to expand

investments both domestically and internationally along with a continued commitment to research and development.

Polar Service relocates in Minnesota

Polar Service Centers moved to a new location in Rosemount, Minn. The facility has eight service bays, 3,800 square feet for parts inventory and parking for 75 trailers. Polar Service Centers provides sales, parts, repairs, inspections and other services for all makes of tank bodies and trailers.

Anua's Puraflo receives revised approval in Maine

Anua received notification from the Maine Center for Disease Control and Prevention that the Puraflo peat fiber biofilter has been approved for use with 12 inches of separation between the seasonal high groundwater table and bedrock. Puraflo is approved for use with a 50 percent size compared to a conventional drainfield. Modules can be incorporated within the drainfield by using either the in-ground or mounded pad dispersal methods.

Orenco launches multilingual Web portal

Orenco Systems added a multilingual section, translated into Portuguese and Spanish and soon to include French, to its website, www.orenco.com. The Web portal includes links to translations of key product brochures.

Imperial Industries hosts WLWCA training sessions

Imperial Industries held training sessions for the Summer Conference of the Wisconsin Liquid Waste Carriers Association (WLWCA). Groups of 12-15 guests rotated among six training sites throughout the day. The event was sponsored by Imperial Industries, V & H Inc., Mid-State Truck, V & H Automotive and National Vacuum Equipment.



Alfa Laval acquires Gamajet

Alfa Laval acquired Gamajet Cleaning Systems, forming a new company, Alfa Laval Tank Equipment Inc. It will operate as Gamajet Cleaning Systems and remain in Exton. Pa. Robert Delaney, president of Gamajet, was named president of the new company. Alfa Laval's existing line of tank cleaning equipment, Toftejorg, was absorbed by the new company for North America. Sales, support and service of Toftejorg equipment will be handled at Gamajet's Exton office.



www.midstatetank.com

Nila-State Tank Co., Inc. P.O. Box 317 Sullivan, IL 61951 Telephone: 800-722-8384 Fax: 217-728-8384



Mid-State Tank manufactures dependable stainless steel and aluminum pressure / vacuum tanks for the septic and portable trucks. Semi trailers are a recent addition to our fine line of tank models.

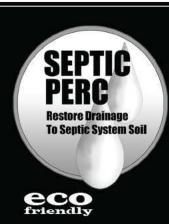
Contact:

Don or Gene for a quote or check on stock tanks

Valve Heaters for your Septic Truck "Arctic Valve Heaters"

Heat the Valve, Not the Sewage SIMPLE — EFFECTIVE — SAFE





For over 50 years

Septic maintenance pros have known the best way to restore percolation to hardpan clay soil is to apply **calcium polysulfide** products.

These products have become old fashioned because now there's a better way. **Septic Perc** is the 21st century product that is cleaner, easier and safer to use, **and it works!**

We know it's better – we can prove it.

Call now for our special We Can Prove It offer: 888-960-8304 www.drainfieldrepair.com/prosales

PRODUCT NEWS

PROCEPTOR PDI GREASE TRAP



With the newly designed Proceptor PDI grease trap from Green Turtle Americas Ltd., contractors can offer customers gravity-separation technology combined with interior installation and the Plumbing and Drainage Institute-G101 certification being mandated by more municipalities.

Suitable for retrofit or new construction applications, the fiberglass unit is an advanced version of the company's long-established Proceptor grease trap. It's rated at 100 gpm; is available in 100-, 150-, 200-, 250- and 300-gallon capacities for liquid volume, and offers grease/food particlestorage capacity equal to almost half the liquid volume, says Silvano Ferrazzo, Green Turtle Americas director of business development.

In the past, installers typically buried large, gravity-separation interceptors outside a building, and put smaller hydromechanical traps under sinks. The Proceptor PDI is larger than under-sink units, which potentially decreases the number of grease traps required, reduces cleaning frequency and lowers operating costs, he notes. But the unit is small enough to be installed under a kitchen floor or a hallway, reducing kitchen odors typically associated with older grease traps. The unit also can be installed above ground, Ferrazzo says.

SPOTLI

By Ken Wysocky

"The Proceptor PDI takes outdoor gravity-separation technology and brings it indoors with a new design for hydromechanical PDI certification, allowing more flexibility for installations," he says.

Because flow rates dictate how many fixtures can be installed in a kitchen, a high flow rate gives restaurant owners more flexibility, while still staying in compliance. For example, with a Proceptor PDI, a restaurant owner could install two or three sinks and perhaps a dishwasher and a floor drain, as long as the total capacity doesn't exceed 100 gallons per minute.

"That gives the restaurant owner a better return on investment," Ferrazzo says.

The unit's design creates a laminar flow pattern that boosts its ability to separate grease, liquids and solids. That, in turn, allows for more storage of grease and solids without exceeding capacity, which means less frequent pumping, Ferrazzo says.

"You may pump out the trap every one to two months instead of every one to three weeks," he says. "The design also contributes to less maintenance, because the waste flows in smoothly and doesn't disturb the layers of grease and solids already formed. And if the layers aren't stirred up, there's less chance of blockages and backups."

The fiberglass traps will not rust and are guaranteed for 30 years against cracking. 877/428-8187; www.greenturtletech.com.



RIDGID 600 SERIES TUBE BENDERS

The 600 Series bender from RIDGID can bend tubes 3/16 to 1/2 inch in diameter with bend radiuses from 5/8 inch to 38 mm. The two-stage handle system enables bends from 90 to 180 degrees without crossing handles, keeping bends in-plane and accurate. Features include visible gain marks to ensure properly aligned bending angles, extra-long handles for increased leverage, vise clamp block for extra stability and cushioned handle grips. **800/769-7743;** www.ridgid.com.



DITCH WITCH RIDE-ON TRENCHER, VIBRATORY PLOW

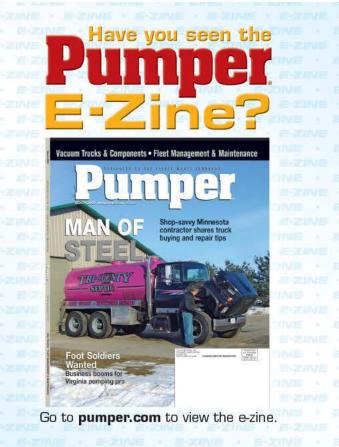
The RT80 Quad heavy-duty, ride-on trencher and vibratory plow from Ditch Witch is designed to provide traction on rough and uneven terrain. The 83 hp trencher features a three-speed, shift-on-the-fly ground drive, 39,000-pound static load rating and 30,742 pounds of breakout capacity. The track frames pivot about the centerline of the axle for stability in muddy conditions or when applying high torque to pull through hard ground. Attachments include vibratory plow, traversing trencher, saw and backhoe. **800/654-6481; www.ditchwitch.com**.

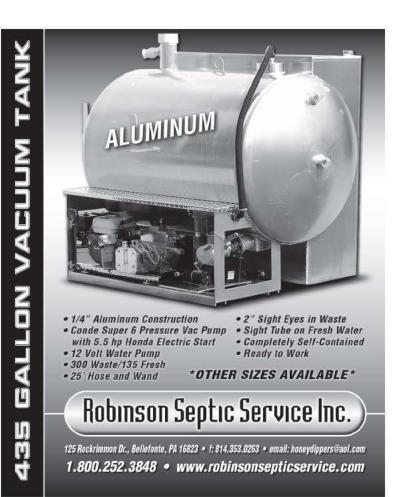


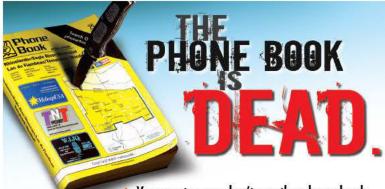
MUNCIE OPTIMUM GEAR PUMPS

Optimum series hydraulic gear pumps from Muncie Power Products feature the Opti-Grip design that contributes to proper housing alignment and helps prevent casting separation and pressure bulging, enabling the pumps to operate at high pressures. Large shaft journal diameters resist shaft deflection, while ultra-premium bushings allow for long-term usage in extreme conditions. The series is available in three frame sizes, with flow rates from 6-62 gpm at 1,000 rpm and pressure capabilities to 4,350 psi. **800/367-7867; www.munciepower.com.**









Your customers don't use the phone book... ...they use smart phones.

Join more than 34,500 service providers at SepticPages.com



- Free Basic Listing
- Mobile Phone Friendly
- Enhanced Listings Start at Only \$9/Month
 - Add Your Web Site
 - Add Your Company Logo
 - Add Service Locations

GO TO WWW.SEPTICPAGES.COM/PUMPER FOR FULL DETAILS.

ASSOCIATION NEWS By Scottie Dayton

Pumper invites your state association to post notices and news items in this column. Send contributions to editor@pumper.com.

DELAWARE

Onsite professionals honored

The Delaware statewide Operator of the Year Awards included three from the state's onsite industry. Ken Walsh, owner of Multi Koastal Service in Ocean View, was named the 2011 On-Site Professional of the Year. He has more than 20 years experience in the industry and has served on the state Department of Natural Resources and Environmental Control advisory board and Delaware Onsite Wastewater Recycling Association board of directors.

Charles White and Robert Bower received Lifetime Achievement Awards. White, owner of C. White and Sons in Seaford, has more than 50 years in the business. The company also won the Customer Service Award from the town of Seaford. Bower, owner of Midway Services in Lincoln, expanded the business in 1988 from septic system designs only to a fullservice company.

Members Kim Yanaitus and Henry McKinney staffed the association's booth at the University of Delaware's Ag Day. They provided onsite demonstrations, handed out literature and answered questions from visitors.

TRAINING & EDUCATION

Alabama

The Alabama Onsite Wastewater Association and University of West Alabama will host a continuing education class Dec. 6-7 at the UWA Livingston campus. The first day is for installers and the second day for pumpers and portable restroom operators. Call the training center at 205/652-3803 or visit http://aowatc.uwa.edu.

Connecticut

The Connecticut Onsite Wastewater Recycling Association is holding its Installer School on Jan. 17, 24 and 31 and Feb. 7, 14 and 21, with a snow date of Feb. 28. Students enrolled in the Installer School are automatically enrolled in the Pumper/Cleaner School on Feb. 21, with a snow date of Feb. 28. The courses, which prepare attendees for the state licensing exam, are at Wesleyan University, Middletown. Call Janice Cavanaugh at 860/267-1057 or visit www.cowra-online.org.

North Carolina

North Carolina State University has the following courses:

- Dec. 3-4 18-hour Introductory Installer Training, Jacksonville
- Dec. 5 Pump System Field Course; Advanced Monitoring and Troubleshooting, Jacksonville
- Dec. 6 Navigating Decentralized Reuse Rules and Technologies, Raleigh
- Dec. 7 Inspector Field Practicum, Raleigh
- Dec. 11 Basic Troubleshooting of Onsite System Malfunctions, Winston-Salem
- Dec. 12-13 Advanced Troubleshooting of Onsite System Malfunctions, Winston-Salem
- Jan. 17 Introductory Drip Design for Wastewater Systems, Raleigh
- Jan. 29 Onsite System Technologies, Bolivia
- Jan. 30 Advanced Treatment for Improved Field Performance, Bolivia
- Jan. 31 Wastewater in the Environment, Bolivia

Call Joni Tanner at 919/513-1678 or visit www.soil.ncsu.edu/training/ training.htm#38, scroll down, click No. 8.

Rhode Island

The New England Onsite Wastewater Training Center at the University of Rhode Island in Kingston has these courses:

- Dec. 6 Nitrogen in the Environment and Onsite Systems
- Dec. 13 Designing Nitrogen Removal Technologies

Call 401/874-5950 or visit www.uri.edu/ce/wq. For soil courses, call Mark Stolt at 401/874-2915 or email mstolt@uri.edu.

Washington

The Washington On-Site Sewage Association and Washington State Department of Health, in cooperation with Washington State University, are offering these certification courses:

- Dec. 5 CAD Design for Onsite Systems, Centralia
- · Dec. 12 Monitoring and Maintenance, Puyallup
- Dec. 27 First Aid/CPR, Puyallup

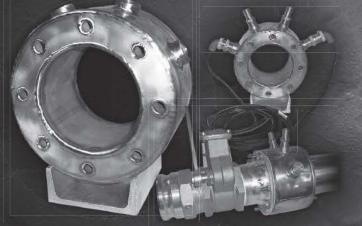
Call WOSSA at 253/770-6594 or visit www.wossa.org.



IRS Section 179: TAX DEDUCTION! Write Off Your Full Purchase Price In 2012! Don't Wait!...Buy Now!..Offer Expires 12/31/12 (Consult your tax professional)



L.T. & E. Inc. VALVE HEATERS



Stainless steel heat sections to keep your valves from freezing.
Available in 3, 4 and 6 inch. TTMA or ANSI bolt patterns.
110 volt heater and thermostat available for "night time" heat.
Manifold for installing system available.

Toll-Free: 1-800-296-8035 web: www.ltetanks.net • email: ltetanks@yahoo.com • ph: 217-268-4650



Inspector Training and Certification:

November 15-16, 2012 - Lakewood, CO CHURCH Onsite Wastewater Consultants, Contact: Kim Seipp (303) 622-4126 or highplains@tds.net February 4-5, 2013 - (TBA) AZ Contact: Janine Lane at (928) 782-5882 or janinel@cals.arizona.edu

NAWT Vacuum Truck Technician:

January 8, 2013 - East Lansing, MI MI & NAWT - Contact Mark Scott at (989) 275-5011 or mscott@i2k.com March 6, 2013 - Ruidoso, NM

N-MOWA - NAWT. Contact: Jace Ensor at 575-937-8304 or nmowa.president@gmail.com

- Watch the NAWT web site and industry publications for updates ---

For more information call: 800-236-6298

Operation and Maintenance Training Certification:

November 1-2, 2012 - Salinas, CA Operation & Maintenance, Level 2 Instructors: Nick Weigel or Kit Rosefield Go to www.COWA.org

January 2013 (TBA), Colorado CHURCH Onsite Wastewater Consultants Contact Kim Seipp at (303) 622-4126 or highplains@tds.net

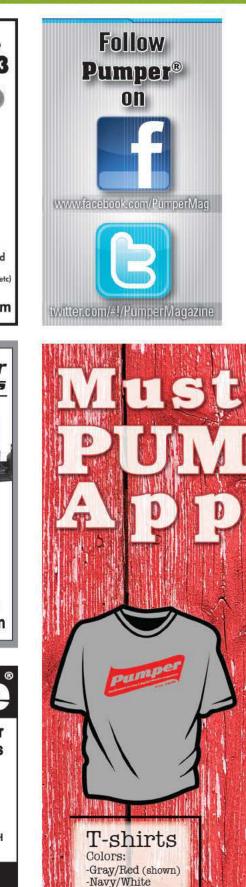
February 6, 2013 Kearney, NE NOWWA - Contact: Jason Orton at (402) 476-0162 or jason@h2oboy.net

March 1-2, 2013 Helena, MT Lewis and Clark County - Contact: Beth Norberg at (406) 447-8385 or bnorberg@co.lewis-clark.mt.us





www.1biotechnology.com



cole-mart.com/pumper

Fluid Technology, Inc.

www.fluidtechnologyinc.com

Marketplace Advertising

The "MOST EFFECTIVE"

Portable Toilet





 More Carbon than other filters
 Patented Cross Flow Design Wicks Away Moisture

IndustrialOdorControl.com 866-NO-STINK (667-8465) 973-846-7817



BÖRGER.

ROTARY LOBE PUMPS

Technical Features:

- Self Priming
 Positive Displacement
- Pulsation Free
- Low Shear Operation
- Reversible Rotation
- Flows up to 5,000 usgpm
 MIP Design =
- Maintenance In Place



612.435.7300 www.boerger.com



MIX & MATCH 60, 80 or 100 liters Buy 3 At A Time & Save

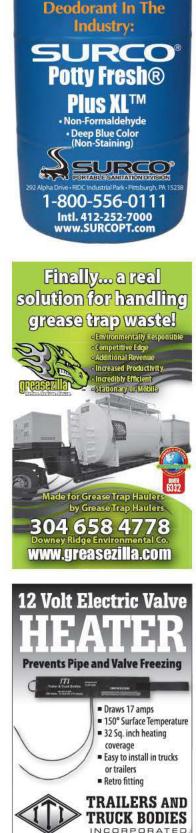
CONTRACTORS INFORMATION TOLL FREE 866.631.5124





AmericanJetter.com

866-9HI-FLOW



1-877-634-1922 | www.itimfg.com Custom Manufacturer of Gas & Oilfield Equipment

classifieds

see photos in color at www.pumper.com

ADVERTISING

SANITATION POSTCARDS & BUSINESS CARD MAGNETS: Remind your customers and prospects with color postcards and magnets. Economical marketing tools. Trade show handouts as well. Call 781-844-8600. Visit www.sanitationpostcards.com. (PBM)

AERATION SYSTEMS

For sale 1998 Terralift, low hours, garaged, looks new, trailer/tool box, two probes. Pics available. 888-298-1006. (P12)

AERATORS

Blue diamond air pump for Clearstream, Delta and Hydro action. ET 80 \$180 + shipping \$25. ET100 \$280.00 + \$25 shipping. Call us at 800-717-8807. (P11)



Multi-Flo alternative new replacement Aerator Roland's Turbo B: \$220 + \$25 shipping, 3 month warranty. Multi-Flo alternative replacement NEW FILTER SOCKS: 30, per case \$220 + \$25 shipping. SPRING CLIPS to hold filter socks in place: \$1.86 per clip. If light can be seen through your filter sock (filtration is under performing) replacement is required. Have a question? Call us at 800-717-8807 or email us at fabulousfungi@gmail.com Roland turbo septic

www.youtube.com/fabulousfungi www.cprservice.org P11



ENVIR-O LINEAR PUMPS are designed for aeration in on-site septic systems/ residential sewage treatment units. Used by manufacturers of NSF certified systems. ULAPPROVED. www.bluediamondpumps.com

770-831-1122

PI11

BUSINESSES

Septic pumping business for sale in Elkton MD.: Due to illness (2) 2,500 gallon vac trucks plus tank finder/line cleaning machine, well known in the community. \$300,000/OBO. Call Jim at 443-309-6745. (P12)

Portable restroom company for sale: Southeastern CT, reduced price, owner retiring from portable toilet business, approx. 500 toilets, 3 trucks. Serious inquiries only please. 860-887-6542. (P12)

SEPTIC PUMPING BUSINESS in northern WISCONSIN For Sale: Includes one 2001 Ford Sterling truck with a 5,000 gallon tank and a 3,000 gallon tank. Asking \$185,000. Serious inquiries only. 715-476-2834. (P12)

Established Business 25 years SEPTIC & EXCAVATING Co.: 2003 Kenworth T800 with 4,000 gallon aluminum tank, Masport pump, liquid-cooled, John Deere 310 SE, extend-hoe 24"-36" buckets, 1995 Freightliner tandem axle-dump truck, 20 ton tandem axle trailer, 5 acres with 40x60 pole barn bldg. Everything very nice, annual gross over 200k (thousand), SW lower Michigan. \$395,000/OBO. Cell, 269-362-2588. (P11)

Wastewater Plant for sale in Georgia: 350,000 gallons of storage with 200,000 gallon aeration basins, JWI filter press, Rotary vacuum dewatering unit, 300 gpm DAF unit, and dewatering box. Approved for septic wastewater, grease trap wastewater, sand trap wastewater etc. The permit is transferable to new owners. Divorce is the only reason its on the market. 678-906-0712. (P11)

Business for sale: \$12,000,000. Vacuum truck and portable toilet business in northern Ontario, Canada. Established, turn key operation, large customer base, three vacuum trucks, two toilet trucks, 100 plus toilets, wash stations, trailers and five dumpsites. Owner retiring, but can help with transition. Property optional. 705-356-3444. (P11)

Portable restroom business for sale. Operating in the Ohio River Valley centered in Louisville, Kentucky for 22 years and has a strong revenue stream and client base. Equipment includes three pumper trucks, one stake truck, two 12-restroom hauling trailers, and 200 portable restroom units. \$195,000. Serious offers only. 502-299-3895. (P11)

Neighborhood Waste Water is looking for acquisitions! Massachusetts preferred but will consider all New England. Contact Todd at mcmahon@arrayfs.com, or leave message at 781-829-0014. (P11)

Family owned portable toilet business: Owner with health issues forces sale, 500 + units, 4 service trucks, located in beautiful Sacramento, Calif. area, 16 years established business, loyal customers. Serious inquiries only. Leave message; will return calls. 916-343-3326. (PBM)

BUSINESSES

WWW.ROOTERMAN.COM. Franchises available with low flat fee. New concept. Visit website or call 1-800-700-8062 x26. (CPBM)

National Grease Recycling Inc. Let us teach you how to recycle restaurant's waste, fryer grease and oil (yellow grease) only. No trap grease. Big \$. Over 30 years experience, will guide you through complete process from collection to processing to marketing to end users. Don't lose your trap business to competitors that offer both services. We also buy cooking oil, unprocessed, anywhere in the country. Call for information. Dewey Walker, 813-752-9535 or 813-758-2552. (PBM)

Established septic company: 2 pumper trucks, 2 service trucks, bobcat excavator and skid loader, 2 trailers, jetters, 1,000 gallon diesel fuel tank and 500 gallon gasoline tank, large storage shed. All equipment paid in full. 25 years of residential and commercial customers and serving 8 counties in northerm VA. This is a steal at \$995,000. Call 540-349-1315. Owner is retiring but can help with transition to new owner. (P11)

BUSINESSES WANTED

WANTED: Looking to acquire septic businesses in Massachusetts. All inquiries will be confidential. 508-868-7627. (PIBM)

COMPUTER SOFTWARE

Pumper Plus Billing Software: Regularly \$795. Mention this ad in Pumper.com and purchase for only \$595. Pumper Plus is a billing software package from Galaxy Systems, www.galsys.com/pumperdemo.asp, that handles billing for septic pumping and portable toilet service-type companies. Inquire at solutions@galsys.com or call 800-985-3029. (PBM)

FreeServiceReminderSoftware.com, FreeServiceDispatchSoftware.com, FreeRouteManagementSoftware.com. (PBM)

DEWATERING

2006 Lely Maximizer in great shape with 2 screens. \$24,000. Call 1-866-362-7687 for more info. (P11)

2001 Green Mountain, 30-yd. dewatering box: Never used, 30-yd. dewatering box, stainless center and wall panels, stainless floor, 10' perforated drainage, rollover tarp, this box will last. \$20,000/OBO. 707-249-9774, CA.(P11)

Seriously!! Are you still trying to dewater using a "box, bed or belt"? I have a better way. Check out ITRDewatering.com then call, or better yet, come watch it work!!! Also works great on straight grease! 317-539-7304, IN. (P12)

DEWATERING



DRAINFIELD RESTORATION

TERRALIFT: Huge discounts on new and used Terralift machines. Call Dick Crane, your authorized dealer, at 1-800-223-2256. (PBM)

Soil Shaker 2000. Universal skid steer attachment for drainfield restoration. Buy factory direct. \$6,250. www.soilshaker.com or call 320-293-6644. (P1-12)

2008 Terralift: Like new, only 29 hours, 3-6' probes, newer model body style, used for compacted septic drainfields. \$20,000/OBO. 269-838-1145, MI. (P01)

DRAIN/SEWER CLEANING EQUIPMENT

RIDGID (KM-1500), (K-380 new), (K-39 new), (K-50 new). \$2,500 takes all. 989-727-2702, MI. (P11)

HAZARDOUS WASTE UNITS

1995 International 4900 with a 2,300 U.S. gallon Presvac, carbon steel, DOT certified 412, vacuum pressure tank. (Stock #6004C) www.VacuumSalesInc.com, (888) VAC-UNIT (822-8648). (PBM)



1993 Chevy Kodiak with a 2,300 U.S. gallon Presvac, carbon steel, DOT certified, vacuum tank unit. (Stock #6615V) www.Vacuum SalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

HAZARDOUS WASTE UNITS

2012 Western Star cab and chassis with a Power Vac 5300, 3,250 U.S. gallons, carbon steel, DOT 407/412 regulations, vacuum tanker with a Hibon PD blower, 5300 SCFM w/ vacuum to 28" mercury, dump type with full open rear door and a Presvac PVB 750 vacuum-pressure pump. (Stock #13518V) www. VacuumSalesInc.com, (888) VAC-UNIT (822-8648). (PRM)

New 3,200 U.S. gallon, carbon steel, DOT certified, 407/412 vacuum tank, dump type with full open rear, door and a Presvac PVB 750 vacuum-pressure pump installed on a 2013 Peterbilt 348 cab and chassis. (Stock #13526 D) www. VacuumSalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

1988 Freightliner cab and chassis with a pre-owned 3,150 U.S. gallon, carbon steel, vacuum tank with a Demag Wittig RFL100 vacuum-pressure pump. (Stock #173GC) www.VacuumSalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

2012 Freightliner M2 with new Presvac 3,200 gallon stainless steel: DOT certified, dump and door vacuum tank, automatic trans, with Robushi 900 cfm 27' blower, 330 hp. KLM Companies, 617-909-9044. (PBM)

2001 Freightliner with Cusco 3,200 gallon stainless steel dump door, DOT certified tank, Demag pump, CAT engine. KLM Companies, 617-909-9044. (PBM)

1997 Freightliner with Presvac 2,300 gallon, DOT certified vacuum tank, Presvac PV750 vacuum pump with new paint and tank inspections. KLM Companies, 617-909-9044. (PBM)

2000 GapVax HG57 WET/DRY on Volvo WG64: 5,500 cfm, 27" Hibon blower, Cummins engine, chassis tank and baghouse, in good condition, ready for work. KLM Companies, 617-909-9044. (PBM)

HYDROEXCAVATING EQUIPMENT



2005 International 7600 Vactor HXX: C13 CAT engine @ 430 horsepower. 289,000 miles, 11,811 hours, Hibon blower, CAT pump......\$175,000/OBO Call 1-519-294-6500, ON P11

HYDROEXCAVATING EQUIPMENT



2005 Sterling AquaTech CB-10: 624 Roots PD vacuum blower. General pump, 35 gpm @ 2,000 psi, 10-yd. debris body, diesel, automatic transmission, A/C, 28,153 miles.....\$90,000 972-938-195 TX P11

JETTERS-TRAILER

2005 US Jetting 4018-300 trailer: Jet 18 gpm @ 4.000 psi. 300 gallon water. HATZ Silent Pack diesel, drive only, 219 hours, very nice unit, rotating rear reel, anti-freeze system, standard nozzle & Warthog rotator included, completely checked over & serviced. Asking price \$26,000. This unit sells for over 40k new! Phone: 1-877-557-7867, IA. (CP11)

2006 ENCLOSED JETTER TRAILER: 14' ready for your motor and pump, 7,000 GVW, motorized hose reel, 50 gallon diesel tank, insulated, white, man door, \$4,900, 484-225-1442, cshafer@ptd.net, PA. (CP12)



Xtreme Flow Hot/Cold Jetter! Model #HJ2TA8536, tandem axle trailer, 35 hp Vanguard 8.5 gpm @ 3,600 psi, 325 gal. water tank, 300' hose, General pump. Fully loaded! List \$34,995. On sale for \$29,995. 800-213-3272. www.hotjetusa.com CPRM

JETTERS-TRUCK

2006 GMC TC6500 cab and chassis trunk mounted jetting unit, with JET EYE camera system, 3,000 psi @ 50 gpm, 1,000 gallon water, 600' of hose, 500 cfm blower and 1/2-vd. debris tank and attachments. \$99,000/purchase price. (Stock #13234) www.Vacuum Salesinc.com, (888) VAC-UNIT (822-8648). (PBM)

JET VACS

1994 Vac-Con: 16-yd. debris tank, 1.250gallon water tanks, telescoping boom with articulating hose reel, 3-stage vacuum, L8000 Ford chassis, 127,545 miles. \$35,000. Call 601-373-3736. (CPBM)

1997 Mack RD688S Presvac, Power Vac N8718, high dump PVHD-3500-0899-5740, 3,500 gallon (2 comp.), 2,500 waste, 1,000 water, Hibon blower, Moro pressure pump with hvd., Mvers DP. (Stock #3131V) www. VacuumSalesInc.com, (888) VAC-UNIT (822-8648). (PBM)



2006 International Vac-Con: 80 gpm, 3-stage fan, 12-yd. debris tank, 73,000 miles...\$145,000 Call 877-389-2227 IN P11



2006 Peterbilt Vac-Con: 80 gpm, 3-stage fan, 12-yd. debris tank, 65,000 miles.\$145.000 Call 1-877-389-2227 IN P11



engine hours.....\$17,000 978-758-6265 PBI

2000 International 2554, DT530, E Allison, 3000 Vac-Con V350SH with Cummins diesel, 45,000 miles, Giant 80 gpm pump, 5-yd. debris tank, 800 gallon, perfect condition, delivery available. \$42,500. 979-525-3164, TX. (PBM)

Jack Doheny Supplies Inc. offers a full range of late model combo units and DOT industrial vacuum loaders. Call us @1-800-3DOHENY. (CPBM)

JET VACS



everything works, 133,000 miles, 6,100 hours.\$35,000 Please call Mike 757-328-9879 P12

Vac-Con industrial machine mounted on a pre-owned 1999 International cab and chassis. (Stock #3918C) www.VacuumSalesInc. com, (888) VAC-UNIT (822-8648). (PBM)



1982 Ford L8000 Vactor 810: Combination jet vac 3208 CAT and new Daewoo diesel pony, 2,000 psi pump at 60 gallons per minute, 10-yd. debris. Oldie but goodie! Bought new truck.\$14,500 360-414-8655 WA P11

LEASE/FINANCING

North Star Commercial Credit: Commercial loans for trucks or equipment, flexible purchase programs to fit your budget, 21 years in the industry. Contact Tom Myers, 877-804-2274. (CPBM)

LYNNRAY FINANCIAL CORP.: Equipment financing, new and used, custom tailored programs, including seasonal skips. Contact Bill Lassiter 800-535-4138 x3, blassiter@ lynnrayfinancial.com. (P12)

PORTABLE RESTROOMS

100 Mixed units (Polyjohn, PolyPortables and Olympic Fiberglass): All in rentable condition. \$250 each, buy 12 (get 2 free), buy 24 (get 5 free), buy 50 (get 12 free). 989-727-2702, (P11) MI

Construction grade units: \$120-\$150/ea., tan and/or blue, all with sanitizer dispensers and rentable condition, NY/CT state line. Call 203-(P11) 948-8869.

Selling 50 units at \$250 per unit. Most of them are Satellite units and all of them are in good condition. Feel free to call Little Stinker Septic Service, LLC at 928-476-4437 or email us at tlstinker@qwestoffice.net. (P12)

PORTABLE RESTROOMS

20 Hampel portable restrooms, tan, used very little, in great shape, \$350/each. Call 812-322-9006, IN. (P11)

300 Construction grade Portable Restrooms for sale (PolyJohn). \$150 per toilet. Minimum purchase of 20 toilets. Please call 608-835-3459. (PBM)

Up to 400 used teal Satellite units, in excellent condition, in Central Florida. \$200/each. Minimum purchase 50 units. 352-860-0195. (PBM)

PORTABLE RESTROOM TRAILERS

Restroom trailer for sale: ELITE (2) 2006. Email proequip1@yahoo.com or call MANNY at 305-970-9837. (P11)

Restroom trailers: Two, three and six station now in stock. A Restroom Trailer Company (Art Company), 269-435-4278, info@arestrrom trailer.com, www.arestroomtrailer.com. (PTBM)

3 Decons, 28' Tonto, 18' Royal, 2001 ASCI, 16' Presidential, 26' Presidential, portable toilet hauler trailers, like new PolyPortables handicaps. 315-437-1291, NY. (PBM)

PORTABLE RESTROOM TRUCKS

2005 F350: 6.0 diesel, automatic, Masport M-2 pump, 500 waste, 250 fresh, aluminum tool boxes, S.S. wheel covers, visor, 180,000 miles. Excellent condition. \$17,500. 989-727-2702, Ml. (P11)

2005 Chevy 5500 portable restroom truck: 1,000 waste, 300 fresh, 275k miles & runs a route everyday. \$20,000. For more information, 317-440-1206, IN. (P01)

2004 Ford F550 diesel, Satellite MD950, automatic, 224k miles, new tires, newly painted. \$18,000. Located in Pennsylvania. Call John, 800-310-0777. (P12)



PORTABLE RESTROOM TRUCKS

2012 Dodge 5500 pumper truck with a new 1,000/300 gallon tank, HXL-4 Masport vacuum pump, 30 feet of 2" suction hose, polished aluminum skirting and boxes, primary and secondary shutoffs, 35k miles. \$69,900. Call for details. 614-560-7505, OH. (P11)



1994 Volvo: 1,000 gallon waste, 300 fresh water. Pumps and runs great. Truck was only used for one event a year.....\$18,500 Call Tavis for more information 707-496-2986 P11



2002 International 4300: DT466, air brakes, 6-spd., A/C, 117,000 miles, brand new 1,100/waste, 275/water tank with toilet rack, new Masport HXL4 pump. Truck is in an excellent condition......\$49,900 GARY: 404-514-2923 GA P11

PORTABLE SHOWER TRAILERS

53' Semi shower trailer, 12 stalls, 3 sinks, 6 showers/each side, very private, 500 fresh onboard, 100 gallon hot water heater, brand new pump and air tank, totally refurbished. \$59,500. Second 53' shower, same configuration, different interior, refurbished a couple of years ago, has some new features. \$45,500. They work excellent and look great. Pictures available. steve@yourrest roomdelivered.com. (P11)

POSITIONS AVAILABLE

DISPATCH ROUTE MANAGER: Portable toilet company in Ohio is seeking an experienced leader to manage routes using routing software to maximize the efficiency of routes and drivers. Must have strong computer skills and exceptional customer service. We are a solid company that offers competitive pay, benefits, retirement, vacation pay and more. Please forward resume to patflynn2@aol.com. (P11)

POSITIONS AVAILABLE

FLORIDA SEPTIC LICENSE FOR HIRE: 10 year established license, no violations, no association with another company, master license. Orlando, 321-436-0150. (P11)

C&K Industrial Services, Inc., a Cleveland based provider of vacuum/waste management and water blasting services, is seeking skilled CCTV & Jet Vac operators at the Cleveland & Akron/Canton locations. CCTV **OPERATORS:** Knowledge of sewer systems and ability to read maps and prints. Ability to recognize and react to hazardous conditions. Must be able to delegate and communicate. Understand and interpret data log entries on installed programs. Strong computer, and communication skills. PACP credentials a plus. Requires moderate travel. JET-VAC **OPERATORS:** 2 years experience operating combination trucks. Must have CDL-B license. Knowledge of sewer systems and ability to read maps and prints. Problem solving skills. Requires moderate travel. To apply visit our website and complete an on-line application at www.ckindustrial.com or in person at: 5617 Schaaf Rd, Independence, OH 44131. No phone calls please. EOE. (CP11)

Nevada Johns Portable Toilets & Site Services is hiring an operations manager. Retirement plan, medical insurance and more. 775-721-8484 or email resume to jobs@nvjohns. com. (P12)

POSITIVE DISPLACEMENT BLOWERS

(2) New Sutorbilt PD blower, model GAFMBPA catalog no., 6 mp. \$2,500/each or \$4,500 for both. 714-381-4141. Pictures at www.empire equip.com. (CPBM)

PUMPS

Used Myers D65-20 pump with new packing and check valves. \$4,750. 714-381-4141. Pictures at www.empireequip.com. (CPBM)

PUMPS SUBMERSIBLE

Waste Water Pumps stainless: 1/1/2 N.P.T. dist charge port 23 F.T., Maximum head lift, % hp submersible with float switch, 2,500 gallons per hour. Stainless steel housing. \$98 + \$25 shipping. Call us at 800-717-8807. (P11)

PUMPS-VACUUM

Buy & Sell all makes and models, new & used vacuum pumps & high pressure water pumps, and good used replacement parts. Call for an inventory sheet and save. www.Vacuum Salesinc.com, (888) VAC-UNIT (822-8648). (PBM)

RENTAL EQUIPMENT

WWW.FIRECAMPVENDORSTRAINING.

COM: Diversify income with base camp equipment for emergency services. Vendors training 101 course. Visit website for more information. (P12)

Liquid vacs, wet/dry industrial vacs, combination jetter/vacs, vacuum street sweeper & catch basin cleaner, truck & trailer mounted jetters. All available for daily, weekly, monthly, and yearly rentals. VSI Rentals, LLC, (888) VAC-UNIT (822-8648) www.vsirentalsIIc. com. (PBM)

ROLL-OFF TRAILERS

2002 Int.: \$27,500. 2000 Int.: \$19,500. 1996 Int.: \$4,100. 1995 Int.: \$16,500. 2000 Int.: \$19,500. 2001 Int.: \$21,500. 256-757-9900 or www.pbsos.com. Equipment for sale. (PBM)

SEPTIC TRUCKS

1998 Ford LT9513, cab and chassis, pre-owned, Cusco, 5,000 U.S. gallon, carbon steel, vacuum-pressure tank with a Wittig RFL-100 vacuum pressure pump package. (Stock #7300V) www.Vacuum SalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

2000 Chevy 7500, CAT engine, manual transmission, Wittig liquid-cooled pump, full open rear dump system, 2,300 gallon, A/C, good rubber, works daily. Asking 35,000 or best offer. Call 863-990-2265, Chancey. (P01)

1992 Western Star 4964: CAT 425 engine, jake, 10-spd., 285,000 miles, 3,300 gallon, steel tank, 54,000 GVRW, LPK Wittig Demag pump, 320 cfm. Engine and transmission rebuilt about 5 years ago, new Michelin front tires, rears good, drive tread, just inspected in July, new king pins and front brakes, rear brakes like new, air ride, power windows. \$27,500. Call or text for pics. 315-783-0803, NY. (P11)



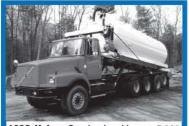
1998 Chevrolet 7500: 3116 CAT engine, 228,000 miles, A/C, very dependable, 2,000 gallon, Jurop pump. Simply needed a larger truck. \$18,000. 812-897-4381, IN. (P04)

SEPTIC TRUCKS



2002 Freightliner 112: C-12, 8LL transmission, 301040, double frame, 4,350 lift tank, full open rear, Demag RFW200, stainless trays, tires and brakes 95%, all aluminum wheels, vibrator, heated valves, ALWAYS garaged.......\$77,000 651-271-8246, Brent P11

2004 Mack E7, 330 hp engine, 10-spd., 54,000 lbs. GVW, NEW 3,365 back tank, NEW Masport HXL 400 pump. www.pumper trucksales.com. Call JR. @ 720-253-8014, CO. (PBM)



1998 Volvo: Quad axle with new 5,000 gallon roll off tank, new Moro pump, new auto tarp system, electric with air to rear with pintle hitch, Cummins with 220,000 original miles, must see. KLM Companies

617-909-9044 PBM

2005 Ford F-550: Diesel, auto, 4x5, new 950 gallon aluminum tank, 650 waste, 350 water, new Masport pump. Call for more details. www.pumpertrucksales.com. Call JR. @ 720-253-8014, CO. (PBM)



2002 Sterling: 18/40's, Cummins engine, 10-spd., full diff. lock, A/C, cruise, new 3,600 gallon tank, alum hose trays, 4" & 6" valves, NVE 607 pump, work lights, 48" toolbox, 167,000 miles, call for pricing. 1-800-826-2308 WI PBM

1995 Mack CH613 with a 4,500 gallon, (2) compartment (300 water/4,200 waste), dump type unit with a Wittig 200 vacuum pump and high pressure water jet pump, 12 gpm @ 3,000 psi. (Stock #5098C) www.Vacuum SalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

SEPTIC TRUCKS

Mini other low millage used trucks available. www.pumpertrucksales.com. Call JR. @ 720-253-8014, CO. (PBM)



www.house-of-imports.com P11





SEPTIC TRUCKS



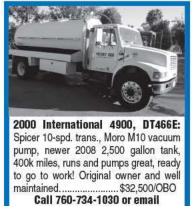
2007 Freightliner M2: CAT C-7 engine, 230 hp, auto, Allison transmission, air brakes, NEW 2,400 gallon tank w/5year warranty, NEW pump 500 NVE, 367 cfm, NEW aluminum hose trays, A/C C/C, NEW DuPont paint, 36" manway rears, sight glasses, NEW Betts lights, NO CDL, 1-year/100,000 mile ENGINE WARRANTY NATIONWIDE, easy financing and leasing........\$55,000 Call Angel at 786-258-3384

www.house-of-imports.com P11



2005 Peterbilt 379: Engine CAT C-15, 475 hp, 13-spd. transmission, air brakes., jake brake, NEW 5,000 gal. tank w/5 year warranty, double frame, 20 front, 20,000 steerable lift axle, 367 cfm liquid-cooled pump, heated valves, aluminum hose trays, A/C C/C, DuPont paint, 44" manway rears, Betts lights, 1 year/100,000 mile ENGINE WARRANTY NATIONWIDE. Easy financing and Leasing. READY TO GO FOR IMMEDIATE DELIVERY.

Call Angel at 786-258-3384, Gino at 786-271-7112 www.house-of-imports.com P11



Jeff at abell.jeff@gmail.com P11

1999 International: 3,500 gallon tank and Jurop pump, 5-year-old tank and pump. \$34,000. 1-866-362-7687. (P11)

SEPTIC TRUCKS



2005 Kenworth T-800: Engine CAT C-15, 475 hp, 10-spd. transmission, air brakes, jake brake, NEW 5,000 gal. tank w/5 year warranty, double frame, 20 front, 20,000 steerable lift axle, 367 cfm liquid-cooled pump, heated valves, aluminum hose trays, A/C C/C, DuPont paint, 44" manway rears, Betts lights, 1-year/100,000 mile ENGINE WARRAN-TY NATIONWIDE. Easy financing and Leasing. READY TO GO FOR IMMEDI-ATE DELIVERY.

Call Angel at 786-258-3384, Gino at 786-271-7112 www.house-of-imports.com P11

2006 International, DT 466, 230 hp, 6-spd., new 2,500 steel tank, Jurop pump. \$55,900. www.pumpertrucksales.com. Call JR. @ 720-253-8014, CO. (PBM)



2005 and 2006 Freightliner, Columbia: M. Benz., 460 hp, 10-spd., jake brake, A/C C/C, NEW 4,500 gallon tank w/5-year warranty, NEW 607 NVE liquid-cooled pump, rear working lights, NEW alum. hose trays, alum., wheels, NEW butterfly or gate valves, heated collars, dual rear, alum. toolboxes, sight tube, double frame chassis, NEW custom DuPont paint, 20k front axle w/full float tires, NEW 20k tag axle, 44 lbs. rears, NEW heavy duty rear bumper, 1-year/100,000 mile ENGINE WARRANTY NATIONWIDE.....\$87,000 Call Angel at 786-258-3384

www.house-of-imports.com P11

1985 Mack DM690S with a 4,000 gallon, dump type unit with a Fruitland RCF500 vacuum pump. (Stock #1153C) www.Vacuum SalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

2003 Freightliner FL70, CAT 3126, 7.2L, 7-spd., 33,000 lbs., GVW, Jurop LC420 USA liquid-cooled vacuum pump, air brakes, A/C, cruise, 109,884 miles. \$40,500. Call Michael, 216-267-2646. (P11)

SEPTIC TRUCKS

2005 International, 3,300 hp Cummins, 10spd., new 3,600 aluminum tank, Masport 400 pump. www.pumpertrucksales.com. Call JR. @ 720-253-8014, CO. (PBM)



2000 Peterbilt 365 tri-axle with new 4,000 gal. septic tank, roll off combination, NEW Moro vacuum pump, 435 hp, Detriot 75k Galbreath hoist, excellent condition. KLM Companies, 617-909-9044. (PBM)

2007 Peterbilt 335: C-7 Eaton 10-spd., 3,800 gallon aluminum tank, 160,000 miles, NVE 506 pump. \$80,000/OBO. 303-295-0077. (P11)



2003 Mack Vision: 427 hp, 10-spd., 470k miles, 5,000 gallon steel tank, Jurop IC 420 pump, BASE remote control, (1) tool box,/heavy-duty brackets, (2) rear tool boxes and work lights, new tank & pumps (2009).\$72,500 s (2009).\$72, Kevin: 240-298-3066 MD P12

Pre-owned Presvac, 5,000 U.S. gallon, carbon steel, vacuum-pressure tank. Mounted on 2004 Western Star cab and chassis with a Masport 20W vacuum pressure pump package. (Stock #3363V) www.Vacuum Salesinc.com, (888) VAC-UNIT (822-8648). (PBM)



Ready to work: USG Thompson Tank, new Jurop pump, 3406 CAT engine, 9-spd., 560,000 miles, AZDOT.\$16,000 takes it Curtis_devine@yahoo.com P11

SEPTIC TRUCKS



2006 Kenworth T-800: CAT-C13, 470 hp, 10-spd., jake brake, 374,000 mile, A/C C/C, NEW 110 barrel tank w/5-year warranty, NEW 607 liquid-cooled pump, rear working lights, NEW alum. hose trays, alum. wheels, NEW butterfly valves, heated collars, dual rear alum. toolboxes, sight tube, double frame chassis, NEW custom DuPont paint, 20k front axle w/ full float tires, NEW 13.4 tag axle, steerable 44 lbs. rears. NEW heavy duty rear bumper, 1-year/100,000 mile ENGINE WARRANTY NATIONWIDE. Ready for immediate delivery. Call Angel at 786-258-3384

www.house-of-imports.com P11

2003 GMC 7500: Diesel, automatic, 1,500 gallon tank, 80,000 miles, clean, ready to work, white with blue tank. 937-674-7288, OH. (P11)

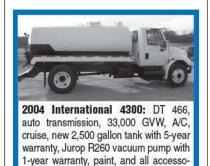
2006 Freightliner M2, 33k GVW, 6-spd., manual transmission, air ride suspension, 250 hp CAT, new 2,500 gallon vacuum tank, complete with manways, sight glasses, 400 cfm vacuum pump, aluminum tool box, L.E.D. light package, rubberized hose trays and much more. \$46,000. Call Dave at 734-731-5256 for a complete spec sheet and pictures. (P11)



2006 Mack Vision: Engine Mac. 427 hp, 10-spd. transmission, air brakes, jake brake, NEW 4,400 gallon tank w/5-year warranty, double frame, 18 front, NEW 20.000 lift axle, NEW pump 420 cfm, NEW aluminum hose trays, A/C C/C, NEW Du-Pont paint, 36" manway rears, 20" top, 2-4" inlets, 6" discharge, sight glasses, NEW Betts lights, 2-years/200,000 mile ENGINE WARRANTY NATIONWIDE, easy financing and leasing. Call Angel at 786-258-3384 www.house-of-imports.com P11

2007 Freightliner M-2: C-7 CAT engine, 188,600 miles, 6-spd. transmission, under CDL, A/C, cruise, air-brakes, new 2,000 gallon tank and Jurop PN84 vacuum pump. Pictures are available upon request. This is a really sharp truck. \$52,000. 740-820-5338. (P11)

SEPTIC TRUCKS

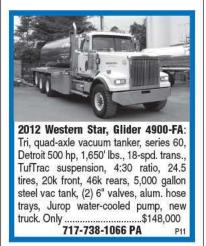


New 4,600 U.S. gallon, carbon steel vacuum tank and a RCF 500 vacuum-pressure pump installed on a 2012 International 7600 cab and chassis. (Stock #13509 A-E) www.Vac uumSalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

ries. \$42,500. Éasy financing available. Phone: 740-988-7878 OH P11



Pre-owned 3,500 U.S. gallon, carbon steel, vacuum tank with a Demag Wittig RFL100 vacuum-pressure pump installed on a 1999 Peterbilt cab and chassis. (Stock #2963C) www.VacuumSalesInc.com, (888) VAC-UNIT (822-8648). (PBM)



2003 International 4300, DT466, auto transmission, 1,100/400 SS tank, wet kit, Condé vac, 235 miles. \$38,000. 1997 Mack CL, guad, 350 hp, 5,700 gallon tank, Fuller 10-spd., Wally 753LN pump, heated valves. \$48,000. Call 262-483-6380, WI. (P01)

P11

SEPTIC TRUCKS



6-spd. transmission, under CDL, A/C, cruise, air-brakes, new 2,200 gallon tank, Jurop PN84 vacuum pump, paint and tires, 5-year warranty on tank, 1-year warranty on vacuum pump. Really nice truck.\$42,500 740-820-5338 OH P11



(3) 2011 Dodge 5500 trucks: 1,000 waste/300 fresh tanks, mileage in the 50,000's on all 3 trucks......\$54,000 **Contact Rodney Lane** 270-832-3793 P11



2005 Freightliner Columbia: 10-spd., 448,962 miles, Detroit 12.7L, 500 hp, new heavy duty 5,000 gallon, built by U.S Tanks with a 5-year warranty, Jurop LC-420 liquid-cooled pump (425 cfm) with a 1-year warranty, rear work lights, all new valves, aluminum wheels & full float tires (optional), aluminum hose trays, aluminum toolbox, double framed chassis, sight tube, new 13,250 lbs. tag axle, new custom paint, large 12 gallon cyclone secondary, 1-year/100,000 mile engine warranty nationwide, see dealer for more details.

Call Mike: 786-554-0892 or George: 954-558-0816, WWW.Nationaltruckcenter.com PBM

1990 International: 466 diesel, 10-spd., 2,100 gallon waste, Jurop pump, 164,000 miles, cab is excellent, new rubber on rear, tank could use paint, \$15,000, 989-727-2702, MI. (P11)

1991 International: 466 diesel, 10-spd., 3,300 gallon waste tank, cab was restored last year (5,000 dollars), excellent, needs troughs and tank painted, Jurop pump, has hoses, new rubber on rear, 116,000 miles. \$20,000. 989-727-2702, MI. (P11)

SEPTIC TRUCKS



2001 Sterling A9500: 12.7L Detroit 480 hp, 170-280,000 miles, Fuller 7-spd., 3 available, very low miles!!! New heavy duty 3,600 gallon U.S tank with a 5-year warranty, new Jurop R260 pump (363 cfm) with a 1-year warranty, double framed chassis, A/C, heavy duty rear bumper, aluminum hose trays, new custom paint, aluminum toolbox, all new valves, rear work lights, large 12 gallon cyclone secondary, easy financing!! See dealer for more details...........\$67,000

Call Mike: 786-554-0892 or George: 954-558-0816, www.Nationaltruckcenter.com PBM



2002 Sterling 7501: 5126 CAT Motor, 7-spd. trans., 170,000 miles, new 2,500 gallon tank, new pump & valves, good solid truck. \$37,000 firm 812-322-0974 P11





1997 Peterbilt: C10, Eaton Fuller 8LL, 2006 Progress 5,000 gal. aluminum tank, 2006 NVE 900 cfm blower.......\$68,000 Please call Larry with interest at 651-775-5782 P11

SEPTIC TRUCKS



2007 Peterbilt 385 (2 available): CAT C-13 475 hp, 9-spd., 482,651 miles, new heavy duty 3,600 gallon U.S tank with a 5-year warranty, new Jurop R260 pump (363 cfm) with a 1-year warranty, heavy duty bumper, all new valves, rear work lights, new custom paint, aluminum hose trays, large 12 gallon cyclone secondary, 1-year/100,000 mile engine warranty nationwide. See dealer for more details.

S3,000 Call Mike: 786-554-0892 or George: 954-558-0816, www.Nationaltruckcenter.com PBM



www.Nationaltruckcenter.com PBM

1988 International 2654: 58,000 original miles, L-10 Cummins, jake, A/C, 8LL modified to 13-spd., locking differential full double frame, 18k front, 20k rear plus 12k pusher, Masport 350 (water-cooled), Erickson tank stretched to 2,750 gallons, 100 gallon fresh, DC-10 pump, accu-level. \$20,000. 707-937-0496, rricca@mcn.org, CA. (P11)

SERVICE/REPAIR

Dynamic Repairs - Inspection Camera Repairs: 48 hour turn-around time. General Wire, Ratech, Ridgid, Electric Eel, Gator Cams, Insight Vision, Vision Intruders. Quality service on all brands. Rental equipment available. For more info call Jack at 973-478-0893. Lodi, New Jersey. (CMPBM)

SLIDE-IN UNITS

Galvanized 450 waste, 210 fresh, 660 total, Vacutrux slide-in, in great shape, good vac, 25' of hose, Honda engine, white in color. \$6,500. 740-776-6927, OH. (P11)

Aluminum, self contained slide-in unit, Condé pump, 450 gallon (300 waste, 150 fresh), well maintained, works good. \$5,000. Call 812-322-9006, IN. (P11)

TANKS

1999 steel vacuum tank, 5,000 gallon, very good condition, 24" manways, top and rear 4" inlet, 6" dump. \$12,000. 607-343-0101, NY. (P11)

Pre-owned Presvac 3,500 U.S. gallon, carbon steel, vacuum-pressure tank. (Stock #6154V) www.VacuumSalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

Pre-owned Coleman 3-compartment: 600 waste, 250 fresh, 100 chemical, stainless steel vacuum tank with a Masport vacuum pressure pump package, tank only. (Stock #2282V) www.VacuumSalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

Vacuum Tanks - New: Sizes from 1,900-4,000 gallons. Great deals! Check us out: 3,600 gallons for \$14,000 and 4,000 gallons for \$15,000. All complete! Will make you a great deal! Delivery available. www.JEagle Tanks.com or Jerry at 800-721-2774. (PGBM)

TOOLS

Crust Busters: Portable, lightweight machine, guaranteed to mix up septic tanks and grease traps! Save time and money! www. crustbusters.com, 1-888-878-2296.(PBM)

T&T Tools, Probes, Hooks: Probes feature steel shafts with threaded and hardened tips. The insulated **Mighty Probe™** tested to 50,000 volts. **Top Poppers™** open manhole covers easily. Free catalog. **www.TandT tools.com.** Phone **800-521-6893.**(CPBM)

TOYS

Septic pumper and vacuum die-cast toy trucks: In your choice of colors and logos, several cabs available. Call 877-450-2100, write to Granite State Collectibles, PO Box 440, New Ipswich, NH 03071; or www.granitestatecollectibles. com. (PBM)

TRAILERS



dition, lined, sealed rear door, good tires. \$22,500 Glenn Pitts. 281-960-2712 P11

TRAILERS-VACUUM/TANKER

Retiring: 2001, 3,600 gallon, 3-axle, vacuum truck, 255k actual miles, one owner, CAT P.S., A/C, 18,000 lbs. front axle, good condition, Transway quality. \$41,500. Buddy @ 951-227-5623, truck can work immediately. (P01)

2000 Shop built 800x375: 800 gallon vac tank with power washer, heat, 375 gallon fresh water, goose neck, 5 hours, Ford gas power, pictures. \$12,500. 970-250-4023, CO. (P11)

1992 Petroleum steel tank trailer (tag-a-long): Same DOT code, 20 inch manway, 20 inch quick opening clean-out, Masport H5, air-cooled vacuum pump, Honda 11 hp engine, electric start. \$8,700. 516-250-9162, NY. (P12)

New Presvac, 5,500 U.S. gallon, carbon steel DOT certified 412 vacuum pressure trailer with a front porch mounted PVB-750 vacuum pressure pump, driven by a Deutz air-cooled diesel engine. (Stock #13525V) www.Vacuum SalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

New 7,500 U.S. gallon, aluminum, vacuum tank trailer. (Stock #13533V) www.Vacuum SalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

TRUCKS (DUMP, MISC.)

2003 International DT 466: Cab & chassis, auto., 135k miles, under CDL, with air brakes. \$26,000. 2005 Freightliner: Cab & chassis, 210 hp, 6-spd., 133k miles, under CDL. \$25,000. 2005 GMC: Cab & chassis, TV 500, 7.8 L, 230 hp, Duramax, auto, under CDL. We have in stock both new aluminum and steel tanks from 850 to 4,200 gallons. www.pumpertrucksales.com. Call JR. @ 720-253-8014, CO. (PBM)

1986 Ford LTL9000: 300 Cummins motor, 10spd. transmission, newer 3,200 gallon vacuum tank, 3" utile vac/pressure pump, air PTO, no rust, new paint, garage kept. \$16,500/ OBO. Call Vinny: 845-674-7790. (P11)

TRUCKS (DUMP, MISC.)







2008 International: Wabo rendering unit, propane heated steam bath, dumps, drums or dumpsters, nearly new, only 8,500 miles. Asking......\$185,000 484-894-6891 P11

TV INSPECTION



CUES CAMERA TRUCK: 1998 Ford E350 w/12' van body, V-8 gas engine, auto, A/C, Cues Night Owl color camera. Track type crawler, 6.5 KW Onan, Data cap. 4.0.\$15,000/OBO 901-850-5303 TN P11

TV INSPECTION

2005 Chevy, DRW TV hi-cube van with Cues equipment, OZII camera, 21" transporter, 6"-15" steerable PIPE Ranger, power lift assembly tires and wheel. \$65,000. djeffers@ feecorpinc.com. (P12)

2 (Almost new) Cues lateral unit trucks for sale: Mint condition, clean, low mileage, motivated seller. For more information please call 602-237-0292. (P11)

VACUUM LOADERS

1997 Mack RD688S Presvac, Power Vac N8718 high dump, PVHD-3500-0899-5740, 3,500 gallon (2 comp.), 2,500 waste, 1,000 water, Hibon blower, Moro pressure pump with hyd., Myer DP. (Stock #3131V). www.Vacuum SalesInc.com, (888) VAC-UNIT (822-8648). (PBM)

1999 International w/ Guzzler ACE hi-dump, brand new 27" Hg blower with warranty from Guzzler, 162k chassis miles, fresh paint, great ready-to-work truck! Located in Longview, TX. 251-510-5194. (P11)



2007 GapVax HV-57: 2007 Volvo VHD chassis, great shape & ready to work, only 64,000 miles with under 700 hours on a Hibon 27" blower.\$155,000 281-960-2712 TX P11



VACUUM LOADERS



Three 2005 Supersucker for sale: Hi-dump, wet/dry vacuum trucks, 6,000 cfm, Roots Tri-Nado blowers with auxiliary rotary vane pump for vacuum and pressure unload. Available for immediate possession. Located in the Midwest.\$169,000/each Call 219-762-1385 for further information

2012 Western Star cab and chassis with a Power Vac 5300, 3,250 U.S. gallon, carbon steel, DOT 407/412 regulations, vacuum tanker with a Hibon PD blower, 5300 SCFM w/ vacuum to 28" mercury, dump type with full open rear door and a Presvac PVB 750 vacuum-pressure pump. (Stock #13518V) www. VacuumSalesInc.com, (888) VAC-UNIT (822-8648). (PBM)



1999 Sterling cab & chassis with a Cusco Turbovac 3800 industrial loader with a jetting system. (Stock #3163C) www.Vacu umSalesInc.com, (888) VAC-UNIT (822-8648). (PBM)



2005 Freightliner King Vac: Rebuilt liquid-ring blower, wet/dry vacuum capability, full-open rear door, hoist dump, Fuller 10-spd. transmission. 972-938-1905 TX P11

VACUUM LOADERS

1994-2005 Industrial Air movers/vacuum loaders: (3) King Vac's, (8) Guzzler's, (4) Gapvax's, (8) Cusco vacuum trucks. Call 1-888-236-1905 for pricing. (P11)

VANES

American Industrial Components: Our vanes are manufactured from the highest quality laminated materials available and are fabricated to exact tolerances and specifications. 800-272-7557. (PBM)

Bullet proof your pump with Kevlar blades. Powerflo's Dura Flo Vanes are premium quality, long lasting and heat resistant. Same day shipment on most models: Jurop, Battioni, Moro, Masport, Fruitland, Demag. Call Powerflo Products 800-758-4788 or purchase online at www.powerflo.com. (PBM)

WANTED

Wanted to Buy: Vactor 2100s and late model Guzzlers. Cash. Phone 800-336-4369. (CPBM)

TRUCKS WANTED: Used Satellite, 950 gallon service trucks, wanted any condition. Call JR @ 720-253-8014. (P11)

WATERBLASTING

WATER JETTING EQUIPMENT: We sell, repair and retrofit water blasters. Visit us at: www.waterjettingequipment.com or phone 714-259-7700. (CPBM)

Gardner Denver T-375M: 21 gpm @ 10,000 psi. Gardner Denver T-450M: 52 gpm @ 10,000 psi. NLB 10-200: 34 gpm @ 10,000 psi. NLB 20-600: 44 gpm @ 20,000 psi. Gardner Denver LC-1500: 390 gpm max, 15,000 psi max. NLB 10-200: 10k max, 34 gpm max. NLB 36-200 6 gpm @ 36,000 psi. Jetstream 4220: 20k psi @ 17 gpm, Allis-Chalmers 10x8x22, 700 hp Wheatley 125: 15 gpm @ 10,000 psi, Wheatley 165: 30 gpm @ 10,000 psi, Wheatley 165: 17 gpm @ 20,000 psi. Boatman Ind. 713-641-6006. View @ www. boatmanind.com. (CPBM)

If you are using an **800 NUMBER** in your ad, be sure it can be used in all areas nationwide.



Advertise Advertise Advertise Advertise Sollo

publishing

www.Pumper.com

fessionals each month

and sell your equipment

in the classified section.

SCHOLARSHIP

Want to earn some extra cash for college? Just create and design a slogan or

a bumper sticker representing NAWT.

If chosen you will be awarded the 2013 William Hapchuk Memorial Scholarship for \$1,000!

Deadline for application is January 1, 2013 Call 800-236-NAWT or e-mail info@nawt.org for the application.





WE HAVE IT ALL! 1.800.701.3942 www.polylok.com

ODOR CONTROL

EXTEND & LOK

EASY AS 128

Before (Cast Iron Pipe)

After (4" Extend & Lok)

With PL-68 Filter & Tee

Solutions for venting & removing odor from septic systems.

Poly-AirTM Now Available Poly-AirTM Activated Carbon Vent Cover 6", 4", 3", 2" & 1.5" Activated Carbon Vent Covers 15", 18", 20", 24" & 30"

EFFLUENT FILTERS



18" & 24" Heavy Duty Covers and Grates for corrugated / ribbed pipe.

800 GPD - 10,000 GPD

HYDRO SHIELD



ORIFICE DIFFUSER



- Fits securely onto either 3/4"-1" pipe or 11/4"-2" pipe.
- Can be installed facing up or down.
- 360° equal flow distribution with impeller.

<image>

TRUST THE LEADER! POLYLOK + ZABEL ENVIROMENTAL ARE THE WORLD LEADERS IN EFFLUENT FILTERS WITH OVER 3,000,000 UNITS SOLD WORLDWIDE!

SEPTIC TANK RISERS & COVERS



Available in

4" & 3"

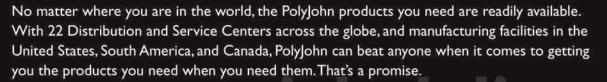


The only Riser on the market with factory installed gaskets.

PRESSURE FILTER & UV DISINFECTON UNIT







POLYJOHN there when you need us

800.292.1305 | 219.659.1152 | polyjohn.com



Powervac 5300 Stainless Steel 316

16 cubic yards Wet and Dry, DOT 407/412, 8" Telescoping Boom, 5300 CFM Blower, 27" HG Vacuum

Liquid Trucks -

DOT 407/412

3000 Gallon Liquid Vac with Dump Type



Septic Tank Unit, 3600 Gallon

Hydro-Trencher

5300 CFM, 27" HG Vacuum, 8" Hydraulic Boom, 3000 Gallon Steel Debris Tank, 1000 Gallon Stainless Steel Water Tank, 9 G.P.M. Water Pump -5800 P.S.I., 980,000 BTU Heater, Sound Enclosure

///PRESVAC

4131 Morris Drive Burlington, Ontario, Canada L7L 5L5 Fax: 905-681-0411 Nationwide Sales & Service 800-387-7763 • 905-637-2353 www.presvac.com