



## **Standard Features That** Improve Your Productivity







High/Low Pressure Wash

25' Tiger Hose

**Fingertip Controls** 







**Added Work Space** 

For those who want a truck with high-end features at a competitive price, the MD950 from Truck Express, a division of Satellite, has what you need.

The newest upgrade is full stainless steel side panels, cabinets and work space to eliminate corrosion and keep your truck looking like new. Other features include:

- 650 gallon waste/300 gallon fresh
- Mild Steel Tank
- Bolted-On Hose Trays and Cabinets for Easy Replacement
- Wing and Cross Tank Baffles for Added Safety
- Tight Turning Radius
- Powder Coated Fresh Water Tank

**Prices Range From \$67 - 78,000** 



To learn more, contact your Area Manager or visit us online at www.satelliteindustries.com.







#### HXL4V Air Cooled

- · Air Cooled Rotary Vane Pump
- 160 CFM
- · 20" Hg Continuous
- · Leader in Porta-Potty



#### RB-DV45 High Vacuum Blower

- Air Cooled Air Ballast Ported Rotary Lobe Blower
- · Airflow up to 494 CFM
- 27" Hg Continuous



#### HXL400WV Liquid Cooled

- Liquid Cooled Rotary Vane Pump for Heat Stability and Extra Reliability
- 400 CFM
- · 25"Hg Continuous



#### RB-DV65 High Vacuum Blower

- Air Cooled Air Ballast Ported Rotary Lobe Blower
- · Airflow up to 912 CFM
- 27" Hg Continuous



# Introducing the NEW!!

# PRO PACK 2

**Engine Drive System** 

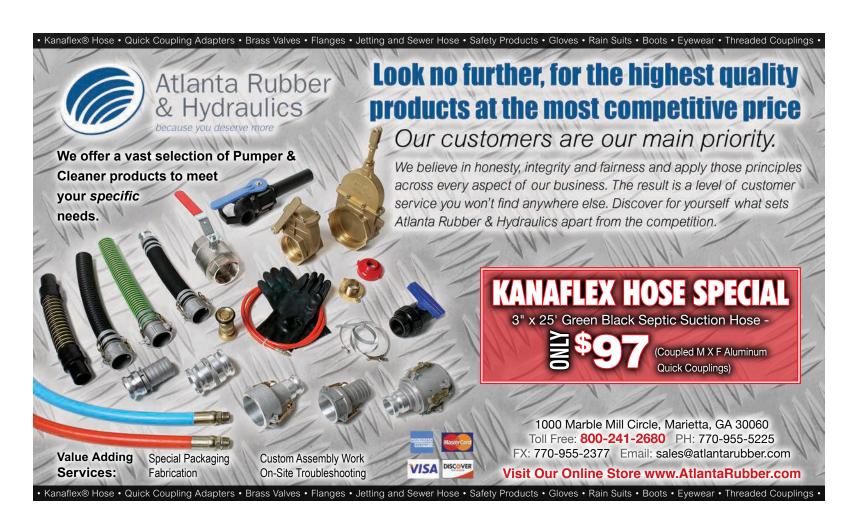
#### SYSTEM FEATURES

- HXL2V 76CFM PUMP
- 5.5HP ELECTRIC START HONDA MOTOR
- DIRECT DRIVEN- No Belts to Replace!
- INTEGRATED OIL TANK
- COMPACT DESIGN

New Low Price at \$2,485.00!!
Contact Us For Further Details and Nearest Distributors

TO ORDER CALL: 1(800) 228-4510

www.masportpump.com









www.transwaysystems.com

1-800-263-4508

# Take advantage of our quality & experience.













YOUR SALES, PARTS, AND SERVICE EXPERTS **Transway Systems Inc.** 

Direct: 1-905-578-1000

Fax: 1-905-561-9176

sales@transwaysystems.com 314 Lake Ave., N. Hamilton, ON L8E 3A2

BUY DIRECT FROM THE MANUFACTURER

# June 2015



# 20 Finding Our Way

- Betty Dageforde

Shifting regulations, costly smog rules and a competitive marketplace guide California's Sludgebusters on an uncertain path to profitability.

**ON THE COVER:** Ed and Yvonne Kapelczak started Sludgebusters Inc. and European Portable Sanitation Service in 1988 and work diligently to keep up with California's many trucking regulations. Ed is shown in the company yard near San Diego. *(Photo by Collin Chappelle)* 

#### 10 Reading Between the Lines: 'Don't Forget to Say Thank You'

What tips from your father helped you become a better person and a successful small-business owner?

- Jim Kneiszel, Editor

#### 12 To the Editor:

Don't require pumpers to file system condition reports.

#### 16 @pumper.com

Check out the latest online-only content at the *Pumper* website.

## **30** Building the Business: Keeping Your Staff Focused

Workplace distractions can sidetrack employees from doing their jobs, but managers can minimize the diversions.

- Marty Martin

#### 34 Rules & Regulations

Washington state wineries may be scrutinized for waste disposal processes.

- Doug Day

#### **38** Dewatering Pioneers

Goodwin Septic Tank Service Inc. stayed ahead of regulations with an innovative disposal facility on Colorado's Western Slope.

- Mary Shafer

## **48** Overheard Online: You're Due For a Pumping

What's the best procedure for sending out service reminder cards?

#### 50 Pumper Interview: Rolling Out the Welcome Mat

After losing big industrial customers, a Pennsylvania treatment facility caters to liquid waste carriers with a new, efficient receiving station and sees the flow numbers come back.

- Ted J. Rulseh

## **54** State of the States: Regulations Reboot

Constant turnover of environmental protection officials and a statewide preference for local control make it a challenge for Pennsylvania wastewater associations to promote updated onsite rules.

- Doug Day

#### **58 WWETT Spotlight**

Dewatering plant owner markets receiving station to the industry.

- Craig Mandli

## **62** Septic System Answer Man: My Dream Septic System

From the settling tank to the end of the distribution lines, an ideal system treats waste efficiently and can be easily maintained.

- Jim Anderson

#### **66** Associations List

#### 70 Money Manager: Stop the Revolving Door

Trying to keep workers doesn't have to cost a lot; not caring why they leave will cost you plenty.

- Erik Gunn

#### 74 Classy Truck of the Month

We feature Raider Rooter, Boynton Beach, Florida.

#### **78 NAWT News**

Updating the EPA Decentralized MOU Partnership. - Dhru Bhatt

## **82** Product Focus/Case Study: Septage Disposal Management

- Craig Mandli

#### **92 Product News**

**Product Spotlight:** Camera system removes blind spots when operating vacuum loader in rail switchyards.

- Ed Wodalski

#### 94 Industry News

#### **Coming in JULY**

SPECIAL ISSUE:

#### **PUMPS & BLOWERS**

- CONTRACTOR PROFILE: Young pumper finds success in Pennsylvania
- PUMPER INTERVIEW: Lagoon Maintenance 101



DEDICATED TO THE LIQUID WASTE INDUSTRY
WWW.pumper.com



**Published monthly by** 



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

© Copyright 2015 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 LaBeau at nicolel@colepublishing.com.

CLASSIFIED ADVERTISING: Submit classified 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 ACCEPTED. 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 INTERNET. Not responsible for errors beyond first insertion.



Jim Flory Winnie May

**DISPLAY ADVERTISING:** Email Jim Flory at jimf@colepublishing.com or Winnie May at winniem@colepublishing.com or call 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:** 2014 circulation averaged 24,800 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.

## 2016 WATER & WASTEWATER EQUIPMENT, TREATMENT & TRANSPORT SHOW



**Education Day:** Wednesday, February 17, 2016

**Show Days:** Thursday - Saturday, February 18-20, 2016

Indiana Convention Center, Indianapolis, IN

www.wwettshow.com



# KNOWLEDGE EXPERIENCE DEDICATION

PASSION OUR PUMP EXPERTS CAN COME TO YOU

Call us 800-383-6304



"You'll be able to reach one of our field technicians <u>anytime</u>, <u>anywhere</u>, day or night to get your questions answered quickly."

Jeff Jaillet - Pittsburgh, PA Sales Office



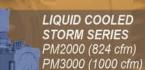
SALES OFFICE PITTSBURGH, PA Toll Free: (800) 383-6304 Tel: (412) 787-8400 ST. LOUIS OFFICE

UNION, MO Toll Free; (866) 383-6304 Tel: (636) 584-8844











MORO
VACUUM PUMPS
COME WITH A
2-YEAR WARRANTY

## ADVERTISER

A
ABBOTT RUBBER COMPANY, INC.
Abbott Rubber Co., Inc81
(ACRO)
Acro Trailer Company75
Amazing Machinery, Inc31
BANDLOCK AMESBURY GROUP
Amesbury Truth105
AMTHOR
Amthor International56
Amuloi international
B
Agua Ben Corporation97
AQUA-Zyme Disposal Sys. 90
arcan
Arcan Enterprises, Inc105
Azmal
Armal, Inc83
ARMSTRONG EQUIPMENT
INC.
Armstrong Equipment87
Atlanta Rubber & Hydraulics
Atlanta Rubber & Hydraulics, Inc4
a riyaraanoo, mo
В
A BEST ENTERPRISES
Best Enterprises, Inc73
Bionetix International76
Seal-R
Brenlin Company, Inc56
Bright Technologies89
•
C
Cam Spray72
Cape Cod Biochemical Co. 65
Centerline Tank & Trailer 60

UCX	<
	ITI
Comforts of Home Comforts of Home Services75 Consolidated Fabricators68	K
Crust Busters/Schmitz Bros64	Ke Ke
D D D D D D D D D D D D D D D D D D D	Ke Ke Kle
E	L
Ecological Laboratories, Inc72 EICA Tankheads, Inc80 Erickson Tank & Pump95 EXPLORER Explorer Trailers -	La Le Lib Lir LM
McKee Technologies71	Lo
F Solutions F. S. Solutions81 Fergus Power Pump, Inc93	Ma Ma
Five Peaks	Mid Mid
	Mil
GapVax, Inc23 Global Vacuum Systems89	Mo
PUMPS Gorman-Rupp Company21	Na
H	L
Hi-Vac Corporation69	Na
Hino Trucks	NA No

Imperial Industries, Inc. .....63

Clear Computing, Inc.......71 In the Round Dewatering....56

I 🛕
1ÎD
ITI Toollege A Treeds Desline OF
ITI Trailers & Truck Bodies .85
K
Kaal/aa
KeeVac
KeeVac Industries, Inc35
Keith Huber Corporation46
kentucky
Kentucky Tank, Inc58
Key Commercial Corp95
Klear it Kone36
L
LANE'S VACUUM TANK, INC.
Lane's Vacuum Tank, Inc4
Lanes vacuum rank, mc4  Lenzyme
Lenzyme/Trap-Cleer4
Liberty Pumps47
Linco-Precision, Inc75
CONTRACTOR SUPPLIES TO SUPPLIE
Industrial Vacuum Equipment
LMT, Inc36
Longhorn
Longhorn Tank & Trailer91
M
Marsh
Marsh Industrial65
Masporti
Masport Masport, Inc3
Masport, Inc3
Masport, Inc3  Mid-State Tank Co., Inc68
Masport, Inc
Masport, Inc3  Mid-State Tank Co., Inc68
Masport, Inc

<b>₫ÎD</b>	pikrite
ITI Trailers & Truck Bodies .85	Pik Rite, Inc67
THE HAILERS & TRUCK DOUICS.00	POLYJOHN"
K	PolyJohn Canada52
KeeVac	POLYJOHN'
KeeVac Industries, Inc35	PolyJohn Enterprises107
Keith Huber Corporation46	POLY OK- Inc. Inc. Inc. Annual Processing Of Edel . Inc. Annual Processing Office .
kentucky	Polylok, Inc./Zabel14
Kentucky Tank, Inc58	POLYPORTABLES
Key Commercial Corp95	PolyPortables, LLC33
Klear it Kone36	POWER BOOSTER BY PRESSURE LIFT
	Pressure Lift Corporation89
L LANE'S VACUUM TANK, INC.	Presvac Systems, Ltd108
Lane's Vacuum Tank, Inc4	1 103vac Oysicins, Liu 100
<u>Lenzyme</u>	R
Lenzyme/Trap-Cleer4	Septic Drainer
Liberty Pumps47	RCS II, Inc91
Linco-Precision, Inc75	·
industrial Vacuum Equipment	-RIDER-
LMT, Inc36	Rider Agri Sales & Service .14
Longhorn	Summit
Longhorn Tank & Trailer91	Ritam Technologies LLC46
M	
	Robinson Vacuum Tanks 76
<b>Marsh</b>	
Marsh Industrial65	ROOTX
Masport Inc3	RootX17
Widesport, mc	REFUSE SYSTEMS
	The state of the s
Mid-State Tank Co., Inc 68	Rush Refuse Systems39
Mid-State Truck Service87	S
MRD	Satellite
Miles and a second seco	Satellite Industries2, 18-19
Milwaukee Rubber Products64	SchellVac Equipment, Inc45
m	Systems
moro	Screenco Systems, LLC71
Moro USA, Inc7	<b>6</b>
N	Out the Outside the Market All Co.
National Truck Center	Septic Services, Inc49, 80
National Truck Center15	WAREHOUSE
INVE	Slide-In Warehouse60
National Vacuum Equipment79	Specialty B Sales52
NAWT	Stamp Works12
NAWT, Inc76	SURCO'
Norweco, Inc41	Surco® Portable Sanitation Products13
NuCongers	1 100000313
NuConcepts91	
0	Sweet Septic Systems94
Oakmont Capital Services76	<b>.</b>
P	TANTOOLS
People's United Equipment	
Finance Corp72	T&T Tools, Inc85

T.S.F. Company, Inc25 Tank World Corp90
TankTec
Transport Truck Sales, Inc77
Transway Systems, Inc5
TSI Tank Services, Inc105
V
VAC-CON Vac-Con, Inc53
Vacutrux Limited32
Vacuum Sales, Inc80
VARCo
w
WALEX
Walex Products, Inc43 wallenstein
Wallenstein Vacuum Pumps/ Elmira Machine32
Wastequip48, 49
Water Cannon, Inc106
Wee Engineer, Inc90
Westmoor Ltd./Conde61
Classifieds98 Marketplace96

Company Inc. 25	REGIONAL Advertisers
Company, Inc25 World Corp90	Midwest Supplement
<b>E</b> C	(after page 74)
pson Tank, Inc64	Advance Pump & Equip3
ort Truck Sales, Inc77	Crescent Tank Mfg3
MS INC.	Liberty Financial Group4
way Systems, Inc5	Marengo Fabricated Steel, Ltd.
ank Services, Inc105	Marengo Fabricated Steel1 Mid-State Truck Service3
V	R.A. Ross & Associates NE2
<b>VAC:CON</b> Con, Inc53	Truck Country4
rux Limited32	TRUCKS V&H Inc2
•	
	Eastern Supplement
ım Sales, Inc80	(after page 74)
ım Sales, Inc80	(after page 74)
ım Sales, Inc80	(after page 74)
m Sales, Inc80	(after page 74)  I dvance  Advance Pump & Equip3  Andert, Inc4
m Sales, Inc80  co	Advance Pump & Equip3  Andert, Inc
w Products, Inc	Advance Pump & Equip3  Andert, Inc
m Sales, Inc80 co27 on Networkfleet9	Advance Pump & Equip3  Andert, Inc
w ALEX  reproducts, Inc43  enstein	Advance Pump & Equip3  Andert, Inc
w Sales, Inc	Advance Pump & Equip3  Andert, Inc
w ALEX  reproducts, Inc	Advance Pump & Equip3  Andert, Inc
w Sales, Inc	Advance Pump & Equip3  Andert, Inc
W ALEX Products, Inc	Advance Pump & Equip3  Andert, Inc



(C)

chempace

Chandler Equipment......37

Chempace Corporation .....74



©2015 Verizon. All Rights Reserved. AD-N134 - 3/19/15



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

# 'Don't Forget to Say Thank You'

What tips from your father helped you become a better person and a successful small-business owner?

#### By Jim Kneiszel, Editor

ather's Day is June 21. What once was a great opportunity to visit with my dad and surprise him with a token gift of gratitude has become a bittersweet moment for reflection on the relentless passing of time. He's been gone a dozen years now, but some of our long-ago shared experiences come back in a flash ... like when I'm trying to solve a problem in the workshop and I pause to wonder what tool he'd grab to handle it. Or when I fill up the car at the gas pump and meticulously log the gallons and price like he did, never to look at that dog-eared notebook again.

As I was surfing the Web recently, I came upon a few stories from the *Popular Mechanics* Useful Stuff My Dad Taught Me issue, and it struck a

chord. It was great fun to read the nononsense practical information fathers pass along to their sons and daughters in some of the most mundane, day-today moments of life. And it made me stop and recall some of the treasured advice my father imparted, probably never expecting I'd remember it ... and how I catch myself passing those same nuggets along to my sons as naturally as rain cascades over a waterfall.

And I wondered if readers of *Pumper* have had similar experiences. I have met so many of you over the years, both fathers and their sons and daughters who run the rock-solid small businesses that define the liquid waste industry. When I contact you to learn about your businesses or sit down to share lunch with you at the Water &



The author's father, Earl Kneiszel, in 2001, holding his photo from the Army Air Corps in World War II. (Photo by Jim Kneiszel)

Wastewater Equipment, Treatment & Transport Show, I recognize the close bonds that come to generations of families who work hard together to earn a living.

#### **LIFE LESSONS**

What would happen if we lost all those common sense lessons handed down from the older generation? How many of these little lessons contribute every day to the way you treat your customers and maintain your equipment? Were your parents and grandparents fully responsible for the resourcefulness you've developed, allowing you to continue to build a successful business?

I think, for pumpers, these family life lessons have a profound impact on running a tight and profitable business. The old-school way of doing things means going the extra mile to provide quality service. It builds ethics to do the right thing for your customer – regardless if it puts an extra dollar in your pocket. Sometimes it fosters a conservative, pay-as-you-go approach to business that helps you weather tough times and save during good times.

Please indulge me a few paragraphs to reminisce about some of the shreds of advice my father shared with me and have stuck with me all these years. And then I'll ask you to share some of your own stories. Maybe through recalling these stories, we can further preserve the smallbusiness success stories that dominate our industry.

So here are a few things Earl Kneiszel taught me:

# Change your own oil. Nobody you hire to do it is going to let it drain properly.

The ritual of changing the oil in my vehicles is an opportunity for me to reflect on my father's meticulous care for his cars. He kept them running great and looking clean; the guys down at the car wash certainly knew his name and his shiny 1989 Plymouth Acclaim. For pumpers, this lesson is about taking a hands-on approach to vehicle maintenance and the importance of pride of ownership for your fleet. Take care of your trucks and they'll take care of you. Pay attention to little details, and your truck will last longer and perform better. Let that clean rig reflect your quality workmanship.

#### Clean the shop at the end of the day.

A messy or cluttered workshop is inefficient and is a poor reflection on you. Many was the time growing up when I heard my father holler up from the basement, "If you can't learn to put away my tools, you're not going to be using them." Sadly, my follow-through on this one isn't always so good. But when I'm confronted with a workbench strewn with tools from my last project, I understand his message. Pumpers know this one, too. There's a tool for every job and a place to store every tool. A well-organized shop – or vacuum truck – helps the business run smoothly.

#### You think you know everything now. That won't always be the case.

When I was 16 years old, I had all the answers. And I wasn't afraid to share all that wisdom with my father. But as he predicted, the older I get, the clearer it becomes that I was clueless about a lot of things. And I see the same pattern repeating itself with my kids. I would bet all you middleaged pumpers have a similar story to tell. My experience tells me that we should all step back and respect the parents who paved the way for our

(continued)

# WWW.VACUUMTRUCKUSA.COM

6995 NW 32ND AVE • MIAMI, FL 33147 • info@houseofimportsvacuumtrucks.com

SINCE 1947

**CALL ANGEL AT:** 786.258.3384

angel@houseofimportsvacuumtrucks.com

CALL GINO AT:

786.271.7112

CALL SEBASTIAN AT:

305.753.1595

sebastian@houseofimportsvacuumtrucks.com



# BUY FACTORY DIRECT!





**2015 Hino** 

2400 Gal., 260 h.p., Auto, Brand New, 5 yr. Warranty Starting at: \$99,000

2006 International

2200 Gal., Auto

Starting at: \$54,000

2009 International

2400 Gal., Auto California Emissions Starting at: \$65,000









2007 Freightliner M2

2400 Gal., Auto, Portable Toilet Hauler

Starting at: \$55,000

2006 GMC Auto, AC, Turbo Diesel, 2000 Gal., 347 CFM Pump

Starting at: \$45.900

2007 International 8600 4500 Gal., Auto, Cummins,

420 h.p., 10 spd.

Starting at: \$85,000





4000 Gal., Detroit, 450 h.p., 10 spd. Starting at: \$79,500



2007 Mack Vision 4000 Gal., 400 h.p.,

Starting at: \$85.500 Auto, Low Miles



#### 2012 International **ProStar - Ready to Build!** 4000-4500 Gal., 500 h.p., 18 spd.,

100k Miles, California Emissions

Starting at: \$110.000

\*WARRANT

- 2 year/100K mile warranty on engine, transmission and rear end for Class 6 and Class 7 vehicles.
- 1 year/100K mile warranty included on engines for class 8 vehicles.

success. If you come from a pumper family, you should be proud of the resourcefulness of your mom and dad and tell them this as often as you can. The small-business journey they've brought you along on is a gift.

## If you can't say something good about someone, don't say anything at all.

My father lived his life with integrity, and he was a tough act to follow in that respect. I can't remember him speaking critically of anyone, and I never heard him curse. I wish my kids could say they had the same experience with their father. My dad did not own a business, but his advice to avoid complaining about or being critical of others would serve pumpers well. Sure, you don't care for that deadbeat customer who refuses to pay his septic service bill, but what good can come out of complaining about him to others? Hold your tongue and you won't say anything you might regret later on.

#### Comb your hair and get dressed up for church on Sunday.

It's funny how things change so much over the course of a generation. It seems like about the only time people get dressed up anymore is to attend weddings and, sometimes, funerals. At least their own. And I can't remember the last time I saw a person under 40 years old drag a comb through an unruly moptop. Wind-blown seems to be the look these days. But I still try to look sharp when I'm at work or at public functions, and I'll tell you why I think you should, too. I still think your customers appreciate a uniformed pumper with clean clothes and appearance. It may sound old-fashioned, but if you care about how you look on the job, most folks believe you care about the job you do.

#### Don't forget to say "thank you."

Since the days when my grandmother would give me a shiny 50-cent piece for my birthday, my father reminded me of the importance of saying "thank you." People want to be appreciated for extending a kindness, and it's important to follow through. That's good advice for small-business owners as well. Thank your customers for calling for septic service. Write it again on the bottom of your invoice. Send them a thank-you note after the bill's been paid. You can't thank people enough for making your business a success.

#### **ADD TO THE LIST**

So what bits of wisdom did your father impart to you over the years? How have those life lessons shaped the business owner you are today? Send your stories to me at editor@pumper.com. I'll share them in a future issue.



# Don't require pumpers to file system condition reports

To the editor:

First, I'd like to say thank you for your well-intentioned editorial regarding the responsibilities of honest, hard-working pumping professionals (To Serve and Protect, March 2015). I think as pumping professionals and members of our greater communities, it is incumbent upon all of us to leave a positive impression on our customers. It was an excellent, persuasive editorial that most would agree with.

However, I think the Ohio pumper ("Ohio") should not be so glibly dismissed as someone who merely wants to play by different rules and therefore should get out of this industry. I have many points I would like to touch on, but I think the most important is this: This man – good, bad or indifferent – appears to be a man of conviction. He also is a man to whom loyalty to customers means a great deal. Enough to forgo a large, if not total, percentage of his income stream.

Although I am not a gambling man, I would be willing to bet my annual salary that many of his customers feel that same loyalty to him. Not because of price; not because of the appearance of professionalism; but because of honesty and loyalty. I'd bet on him and I haven't a clue as to his success or station in life. He should not be so easily dismissed as a joke or as a close-minded relic of our industry.

I agree all citizens of this great country do have a right and responsibility to preserve, protect and defend the fortunate lives we live. I doubt many would argue that this is not an agreeable goal. I also believe "Ohio" does not want the responsibility of playing inspector, agent or police officer while conducting his normal business operations; and I agree. He is electing to not be forced to tell on his customers, friends and neighbors.

As a professional, I assume he is already explaining septic system deficiencies to his customers. He is probably pitching them on the necessary repairs and maintenance required. It is in "Ohio's" self-interest to do so, while simultaneously educating and helping his customer. Capitalism at its finest. But he should not be forced to play judge and jury to those same people.

One simple solution to this dilemma could be to require the exact same maintenance and inspection intervals, but place the onus for reporting on the consumer. Another option would be for the local administrative authority to inspect and evaluate system operations, thereby owning their evaluation regarding an onsite system. "Ohio" is right; having the pumper reporting directly to a health department is both a real and perceived conflict of interest. His concern that his loyal customers will perceive it as a conflict is enough to make him tap out. I can only imagine the mental wrangling he went through.

While I feel many of the smaller points in your editorial are easy to argue, if not refute outright, the larger dilemma I have is the slippery slope this law places on our friend, "Ohio." How soon before other service providers are tasked with reporting building failures? Obviously, if a contractor presumptively finds less than satisfactory electrical, plumbing or building concerns and fails to report them, then a home and neighborhood might burn, and lives could be lost. Or perhaps the local mechanic will now be required to report brake systems that are not in as-new condition because they might fail. This could lead to death or injury of people in the community if not addressed. Perhaps leaking oil or over-polluting cars must be identified or the rest of us cannot swim or breathe in an idealized world.

I would not argue that these are not real concerns and problems. However, "Ohio" did not choose to pump, plumb, build, wire or repair cars so as to play police officer. He chose his career path to earn a living, improve his lot in life, build a stronger and better community — and probably and most honorably — provide for his family. Why don't we let him do that? Without suggesting that he isn't welcome in our fold? In our industry? Because, regardless what you — the editor of *Pumper* — thinks, he is welcome in mine.

Eric Burr San Jose, California

# IF YOU CAN'T STAND THE HEAT STAY OUT OF THE RESTROOM.

Hot, sticky summer weather and high user traffic won't stop Potty Fresh® Plus XL™ portable toilet deodorant.
Potty Fresh sets the ultimate standard for liquid concentrates. It is our strongest, most fragrant portable toilet deodorant ever!

Portable Toilet Deodorant Our powerful biocide kills odor-causing germs, so toilets stay fresher longer. So while our competition may wilt in the upcoming summer heat,
Potty Fresh® Plus XL™ keeps your portable toilet clean and fresh. Call today for more information.



Contains Metazene® M O L E C U L A R Odor Neutralizer Metazene® actually NEUTRALIZES ODORS at the molecular level.





#### Polylok 12"x12" Square D-Box & Riser

The 12"x12" Polylok square d-box comes factory pre-cut with one inlet and three outlets. Four seal assemblies are provided with each unit and will accept 2", 3", and 4" pipe. Optional 6" seals are also available for applications demanding 6" pipe. Polylok's 12"x12" square d-box has a 5 gallon capacity and is designed to withstand normal abuse in landscaping applications. Bring your d-box to grade with Polylok's new 12"x12" square riser. These risers are watertight and easy to install!

#### Polylok PL-250 (6" Effluent Filter)

Polylok, Inc. is proud to introduce the newest addition to our effluent filter line! Ideal for flows of up to 3,000 GPD (gallons per day), the PL-250 is the perfect solution for higher residential flows.

250' of 1/16" filtration 360° of filtration

Cartridge cannot be installed incorrectly Cartridge will fit any standard 6" tee Accepts a 1" PVC handle



#### **Polylok Pipe Grates & Covers** (3", 4", 6", 12", 15", 18", 24" & 30")

Polylok grates and covers are ideal for use with corrugated or ribbed pipe. They are made of HDPE with the highest UV protection on the market today.



#### 1-855-893-5461 / www.polylok.com















<u>Model</u>	CFM At Free Air	CFM At 15'	
PN23	92	74	
PN58	230	205	
PN84	317	252	
PN106	388	311	









Equipment









7716 Greenville-Celina Rd. • Greenville, OH 45331 Phone: 937-548-2080 • Fax: 937-547-0818 www.rideragrisales.com 

# **NationalTruckCenter**

**Call For More Info** 

**GEORGE:** 954-558-0816

PETER: 786-314-6584





#### 2007 Mack Vision

4000 Gal. US Tank With & Without Hoist. Low miles, All New Equipment, Starting \$88,000



5000 Gal. Tank, Cummins 485HP, 18 SPD, Full Lockers. All New Equipment. Extra cab w/all factory options \$179,500



#### 2 - 2007 International 8600

4000 Gal. Tank, Cummins ISM 425 hp, 10 spd., Jake Brake. All New Equipment. \$78,000



#### 3 - 2006 Sterling Acterra

3600 Gal. Tank, Jurop R-260 Pump Factory Double-Framed. All New Equipment. \$69,000



#### 2005 Freightliner Columbia

4000 Gal. Dump Tank, 475 HP, 425 CFM All New Equipment. \$86,000



#### **2016 INTERNATIONAL 4300**

1800/400 Gal. Tank, Under CDL W/Potty Rack. All New Equipment. \$99,800



#### 2006 FREIGHTLINER M2

3,200 Gal. Tank, Jurop R-260, 20k Lift Axle, 52k GVW, 116K Miles, Automatic. All New Equipment. \$74,000



#### 2006 GMC C7500

Under CDL! Duramax Power, 1800/400 Gal. Tank, Allison Auto, All New Equipment. \$55,000

1-YEAR, 100,000 MILE ENGINE WARRANTY NATIONWIDE - 5-YEAR WARRANTY ON TANK

# @Pumper.com

Visit the site daily for new, exclusive content. Read our blogs, find resources and get the most out of *Pumper* magazine.



PUMP PICKS

# sizing made easy

Septic pumpers who are branching out into onsite installation and maintenance often work off the designs of others, but everyone installing a system with pumps should understand how that pump was selected. Learn the basics from expert Jim Anderson.

pumper.com/featured

#### emails and alerts



Visit **Pumper.com** and sign up for newsletters and alerts. You'll get exclusive content delivered right to your inbox, and you'll stay in the loop on topics important to you!

You can increase positive perception among consumers and business owners when you're identified as a member of the chamber of commerce.

- 6 Benefits of Joining a Business Association pumper.com/featured

**EROSION CONTROL** 

#### 5 easy fixes

It often becomes the installer's responsibility to control erosion after any work that disturbs the soil. Here are five easy practices to make part of your installation or repair plan.

pumper.com/featured

IN FOR THE LONG HAUL

#### employee longevity

Cover star and longtime business owner Ed Kapelczak says there is no magic formula for perfect hires, but it's not just luck either. Here he shares his top five tips for better employee management.

pumper.com/featured



#### GOT A SUITABLE SITE?

#### onsite know-how

Even if you're strictly sticking to pumping, knowledge of all aspects of the systems is still important. This translates into better working relationships with installers and inspectors and results in better system maintenance. See what you need to know here.

pumper.com/featured

**CONNECT WITH US** 

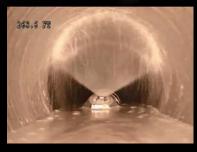




Find us on Facebook at

**www.facebook.com/PumperMag** or Twitter at **twitter.com/PumperMag** 





#### THIS CHANGES EVERYTHING.

Once again, RootX® has changed the game of root control. Introducing the FDU 300 applicator— better in every way and engineered to make applying RootX® to mainlines faster, easier, and more effective than ever. It works with your existing jetter equipment, so there is no expensive equipment to buy, no costly upgrades, and no waiting to get on a contractor's schedule.

Within a month after applying RootX®, roots are dead and decaying — keeping your lines flowing for up to 36 months. Guaranteed.\*

Now, more than ever, RootX® is the Right Solution. Right Now.

To find out how you can put the FDU 300 into your root control arsenal, visit www.RootX.com, or talk to your RootX® representative at 1-800-844-4974.



www.rootx.com



# TAKE HOLD OF YOUR MARKET!

How do you gain market share in a competitive environment? Number one, provide the best service in your market. But, be aware that gaining market share does not guarantee more profits.

If you spend a lot of money repairing and replacing equipment in the field, or if your deodorizers fail, the cost of labor, parts and added travel time will eat up any additional profits you gain.

The solution to increasing profits while you increase market share is to have equipment and deodorizers that require little or no maintenance.

For example, Tufway or Maxim 3000 restrooms have an average yearly cost of under \$4 per year in replacement parts. That means you will have little or no repairs most years for these restrooms, allowing you to keep them in the field earning profits. These same cost savings are available when using our trucks, deodorizers and restroom trailers.

Buying from one source is not about convenience or low prices, it's about quality and a higher return on your investment. Start earning more profits with less headaches by contacting your Satellite Area Manager.













#### **By Betty Dageforde**

alifornia pumper Ed Kapelczak figures he's spent \$300,000 to comply with the state's strict air quality standards among buying new compliant vehicles, retrofitting qualifying existing vehicles and removing non-qualifying vehicles from his fleet.

California has some of the strictest smog control regulations in the country. But Kapelczak offers a warning to other pumpers. "You know that saying, 'What happens in Vegas... [stays in Vegas].' Well, what happens in California tends to spread all over the country."

Kapelczak is not opposed to doing his part to reduce emissions and works hard to comply. But he's got two main frustrations with the process. First, the competitive landscape has gotten a little shaky as some pumping companies try to fly under the radar using noncompliant vehicles, he says. That gives them lower operating expenses than companies who are in compliance, and therefore the ability to bid lower on projects.

His second concern is constant changes in the regulations, never quite knowing one year to the next where they stand. "You make a plan, you take action and then the goal post went to another area," he says. "Even regulators can't keep up."

(continued)







Kapelczak and his wife, Yvonne, are the owners of Sludgebusters Inc. and European Portable Sanitation Service in Ramona, California, a rural area about 35 miles northeast of San Diego. They operate out of a 1,000-square-foot office building on a 3

In the busy Sludgebusters office, Ed Kapelczak talks with a customer in the background, while receptionist Claudia Aguirre schedules the following day's projects.

1/2-acre property with a supplemental storage yard in Borrego Springs, 50 miles away.

The team includes office manager Alma Salcedo, three septic technicians (including their son, Joe), three portable restroom technicians, a mechanic, a receptionist and a part-time person who cleans the yard and trucks. Kapelczak works in the field and Yvonne handles administration.

#### A CLEVER NAME

position as "shock absorber," as he calls it, between management and the workers became a losing battle, he left. "I figured I'd just go dig leachfields in the back country just to be peaceful," he says. Plus the area seemed ripe for competition as there was only one septic service company in the area.

With Yvonne's help, he started out in 1988 doing septic repairs and inspections. Seven-year-old daughter Christina also got in on the act, coming up with the company name. "I was explaining to her what a sod buster

If we do a nice job for somebody, they tell their neighbors. We don't regard our customers as 'ours.' We try to win them every time.

- Ed Kapelczak

was and she just looked at me and announced, 'We are sludgebusters,'" Kapelczak says.

In 1992, he bought a 1977 Chevy C65 with an 1,800-gallon Lely Manufacturing Inc. tank and started pumping septic tanks – which immediately brought in more revenue than repair work, he says. By 1996, they were ready to bring in their first employee.

Along the way they also picked

up two Case backhoes (580K and 580M), a 2001 John Deere 250 skid-steer, a Case 580C skip loader, Cobra Technologies plumbing snakes, a camera from Amazing Machinery and locators from Prototek, Dunham & Morrow Inc. and T&T Tools. "And we've got dump trucks and pickups and 1-tons just scattered about," Kapelczak adds.

In 2000, the company started offering portable restrooms after receiving a number of requests from existing customers. Christina again chimed in with a name. "I just asked her what would be a good name for a toilet company and she goes, 'European' [You're a-peein']. We all giggled a little bit, but that's eventually what we ran with," Kapelczak says.







- •User friendly, easy to operate and maintain
- ·Standard 3/16" stainless steel water tank.
- •Tube storage mounted at chest height.
- ·Shaft driven water pump.
- •Low center of gravity water tank and debris body are between the frame rails.

  Others mount water tanks high on the sides or all over the sides of the truck obstructing any room to maintain the chassis and body.
- •Durability stainless steel water tank.

  You can't find a used GapVax MC on the used equipment websites because people keep them forever.

Contractor grade.

•Commonly used components, ensure readily available replacements - not proprietary to GapVax Not to mention CUSTOM-BUILT, Versatile, and just plain awesome~see full specs on our website

> TEXAS 281-844-8684 888-442-7829

They started with 10 units and used the septic truck outfitted with a water tank for service routes. Within six months they picked up a 2001 Ford F-550 with a 550-gallon waste/250-gallon freshwater tank. Today portable restrooms account for 25 percent of their revenue, about 20 percent for special events, 40 percent for construction and the rest is for agriculture, fire camps, wineries and tourist attractions. They've got 500 units (standards from PolyJohn Enterprises, ADA-compliant units from PolyPortables); four NuConcepts deluxe solar units, popular with wedding clients; and two hauling trailers from McKee Technologies Inc. (10-unit and 12-unit).

#### **KEEPING TABS**

The company covers an 80-mile radius of Ramona, serving most of San Diego County, an area known for its varied weather and terrain. "We've got snow, desert, beaches, fog," Kapelczak says. The desert can be especially treacherous, reaching temperatures as high as 125 degrees.





### Joining forces helps everyone

Ed Kapelczak, owner, along with his wife Yvonne, of Sludgebusters Inc. and European Portable Sanitation Service in Ramona, California, is a big believer in participating in trade organizations. He is a member of Portable Sanitation Association International, certified by the National Association of Wastewater Technicians and has served as president of the San Diego County Sewage Haulers Association for the last 15 years.

What started out in the mid-1980s as a gripe session with competitors yelling at each other has now settled into bimonthly dinner meetings where contractors network, swap stories and discuss problems facing the industry. It's not unusual for competitors to partner up and work together on emergencies or large projects. It's also a self-policing organization where complaints are mediated internally.

One accomplishment Kapelczak is particularly proud of during his tenure is the development of a set of inspection standards and procedures for contractors

> to use when doing inspections. It took years to get everyone's buy-in, but they finally ended up with a program everyone used.

> "We just took the best of what everybody offered and threw out stuff we couldn't agree on," he says. "I wrote the procedure on where you go to the tank, observe this, check that, run the water for 20 minutes, record whether it rises in the tank or not, and if it does how much and how fast it goes down."

Kapelczak believes the organization has been enormously beneficial for both himself and his company, and has raised the bar for the whole industry. "I will just say it's a good outfit," he says.

#### @pumper.com

To learn more about Sludgebusters, check out a video interview with owner Ed Kapelczak at www.pumper.com.

Although Kapelczak trusts his employees and gives them plenty of autonomy, he does like to keep in contact with them when they're in the desert. "It's not so much to watch the guys, but it's because we send them out in that environment. They're on their own so we call them about three times a day."

Kapelczak got a scare when one of the guys rolled a truck and didn't know where he was. The company doesn't use tracking or scheduling software but found

him by retracing his route. "After that we installed Detroit Connect GPS units (Freightliner) in some of the [restroom] trucks that go out into the desolate areas," he says. Nowadays most of the drivers' smartphones have GPS.

Vehicles have also gotten stuck in snow and sand. "When you've got a lot of trucks on the road, stuff happens," Kapelczak says. "I don't go home until everyone's in, or at least I have a real good handle on what's going on."

#### **COMPETITIVE COMPLICATIONS**

Kapelczak takes an old-fashioned approach to marketing: phone book, reminder cards and – the most effective – word-of-mouth. "If we do a nice job for somebody, they tell their neighbors," he says. That service attitude also extends to office personnel – just hearing a friendly voice on the line.

**Above, Left:** Technician Peter Salcedo disconnects the vacuum hose after completing a pumping job in the San Diego, California, territory of Sludgebusters.

**Above, Right:** Ed Kapelczak shows evidence of a deteriorating septic tank lid to a homeowner. Kapelczak says the condition of this tank showed it hadn't been pumped in nearly 20 years.

When you've got a lot of trucks on the road, stuff happens. I don't go home until everyone's in, or at least I have a real good

handle on what's going on.

— Ed Kapelczak

"We don't regard our customers as 'ours.' We try to win them every time." Kapelczak says they can't always compete on price, but they do try to have the best service.

That philosophy is what's gotten them through the low-balling practices of some of their competitors who haven't spent the \$15,000 to \$20,000 per truck like Sludgebusters did to bring older trucks into compliance with smog control requirements. "Those guys will probably be able to run for a while, and we can't get the price up to support all the money we've spent," he says. "But they won't be able to run forever. This is a cycle we have to weather."

The company's active fleet includes a 1999 Peterbilt with a 3,200-gallon tank and Challenger pump (National Vacuum Equipment) from 27th Trucks Inc.; a 2001 Freightliner with a 1,500-gallon tank and Jurop/ Chandler pump from Thompson Tank Inc.; a 2001 Freightliner with a 3,000-gallon tank and Jurop/ Chandler pump from Transport Truck Sales Inc.; a 2001 Ford F-750 with a 2,200-gallon tank and Masport Inc. pump; and a 2011

(continued)



Portable Toilets | Holding Tanks | Hand Wash Units | Accessories











- Tank sizes 60, 105, 225, 300 and 440 gallons.
- Standard holes are 2 - 3" holes with plugs
  - Can customize holes to match your specs



**TJ Junior Single Free Standing Sink** (16 gallons fresh water)



90 Gallon **Free-Standing Sink** (45 gallons fresh water)



**Containment Tray** 





Interior View of Deluxe TJ-III



**TJ Handy Stand** Waterless Gel Touch **Dispensers** 



- **60 Gallon Rinse Tank**
- **Assembly**
- Sky Heater
- Corner Shelf
- Lifting Bracket Towel Dispenser
  - Hand Washer **Available For Both Styles of Tuff-Jon**



2930 S St. Phillips Rd. I Evansville, IN 47712





**Above:** Sludgebusters is constantly updating its fleet of trucks. This new rig, a 2015 Freightliner with a Battioni pump and a 5,460-gallon tanker from Mid-Continent Truck Sales and Bird Tank, is used for large pumping jobs and waste storage.

**Right:** Mechanic Austin Williams repairs a shovel in the company yard. Having a dedicated mechanic allows Sludgebusters to conveniently care for its fleet of trucks and equipment used in the field.

"I've got a pile of trucks, probably five or six," Kapelczak says. "They ran just fine, there's nothing wrong with them and we just pulled the tanks off of them and put them on something else that would pass the smog requirements."

Selling off older vehicles is getting harder to do, as there is now a glut of them in the market as a direct result of the regulations. Kapelczak says he has to go farther to sell them as even neighbors Arizona and Mexico don't want them.

#### **FORGING AHEAD**

Although there have been a few roadblocks for the company over the years causing increased operating expenses, Kapelczak fights to keep his customers and win new ones through good service, a friendly staff and clean

equipment. He's proud to say his company was recognized as business of the year in 2011 by the Ramona Chamber of Commerce. "We've got a wall of plaques from state senators, federal senators and assembly people," he says. They've also been recognized by the county board of supervisors.

Although it sometimes seems as though the state is working against his industry, Kapelczak keeps an upbeat attitude and just does what has to be done. "I try to keep real high ethical standards," he says. "I just always found playing by the rules kept me out of trouble."

International with an 1,800-gallon tank.

On the portable sanitation side, they've got three Isuzu Workmates with Masport pumps (2003, 2006, 2008) with 600- to 700-gallon waste/350-gallon freshwater tanks built out by FMI Truck Sales & Service, and a 2005 Freightliner built in-house with the tank from their 2001 Ford that no longer met smog requirements.

All tanks are steel – "because we're cavemen and we weld on the trucks ourselves," explains Kapelczak.

They've also got three tractors – two 2001 Freightliners and a 2015 Freightliner with Battioni pumps (National Vacuum Equipment) – and four 5,460-gallon tankers from Mid-Continent Truck Sales and Bird Tank used for large pumping jobs and waste storage. Kapelczak is adamant they not be taken to a disposal facility until full, as the price is the same regardless of how much is in the tanker.

The company is required to dump in San Diego, and in 2008 got quite a shock when rates went from one of the lowest in the country to one of the highest. "At one point we were paying \$5 or \$10 per 1,000 gallons, and now we're paying \$80 or more," Kapelczak says. "It redistributed all the customers and a lot of people started putting off cleaning their tanks. It was a giant impact on our business."

#### THE RIPPLE EFFECT

Kapelczak says unfair competition is the least of his regulation worries. "I just want to know what the rules are," he says. Besides the number of rules increasing, the existing rules are ever changing.

"We bought an '06 and an '08 truck because we knew these rules were coming where they said a percentage of our fleet had to be with a certain smog output. Then a couple years later they said they were going to change the regulation so trucks under 26,000 pounds, you can only keep those for 20 years." After complaining, he was given a little leeway on the '08 but not the '06.

"It's also the exemptions and exceptions that make it so inconsistent," he says. For example, a fleet of three trucks or more has one set of regulations, less than that another. Construction and agriculture vehicles have different rules than other commercial trucks.

In general, vehicles 20 years and older have to be taken out of service.

#### **MORE INFO**

**27th Trucks, Inc.** 305/835-9030 www.27th-trucks.net

Amazing Machinery LLC 800/504-7435 www.amazingmachinery.com (See ad page 31)

Chandler/Jurop 800/342-0887 www.chandlerequipment.com (See ad page 37)

Cobra Technologies 800/443-3761 www.cobratec.com

**Dunham & Morrow, Inc.** 703/661-2144 www.magneticlocator.com

Explorer Trailers -McKee Technologies 866/457-5425 www.explorertrailers.com (See ad page 71)

FMI Truck Sales & Service 800/927-8750 www.fmitrucks.com

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

**Lely Manufacturing, Inc.** 800/334-2763 www.lelyus.com

Masport, Inc. 800/228-4510 www.masportpump.com (See ad page 3) Mid-Continent Truck Sales 800/414-5365 www.vacuumtrucksales.com

National Vacuum Equipment, Inc. 800/253-5500 www.natvac.com (See ad page 79)

NuConcepts 800/334-1065 www.nuconcepts.com (See ad page 91)

PolyJohn Enterprises, Inc. 800/292-1305 www.polyjohn.com (See ad page 107)

PolyPortables, LLC 800/241-7951 www.polyportables.com (See ad page 33)

**Prototek** 800/541-9123 www.prototek.net

**T&T Tools, Inc.** 800/521-6893 www.mightyprobe.com (See ad page 85)

**Thompson Tank, Inc.** 800/421-7545 www.thompsontank.com (See ad page 64)

**Transport Truck Sales, Inc.** 888/395-7551 www.transporttruck.com *(See ad page 77)* 

# PUMP PROBLEMS? WE REBUILD THEM!



# WE'LL MAKE YOUR PUMP SUCK!



THE ONLY **ONE STOP PUMPER SHOP!**SALES + SERVICE WITH JUST ONE CALL

TOLL 866-872-1224



# NATION'S LARGEST SOURCE OF IN STOCK VACUUM TRUCKS

### PORTABLE RESTROOM SERVICE TRUCKS





Units 1496 2015 Ford F550 1200 Standard PRT (900/300) HXL4, Flojet \$79,900

**Monthly Payment: \$1318** 



2015 RAM 5500 1500 Standard PRT (1100/400) HXL4, FloJet \$83,600

Monthly Payment: \$1379



Unit 1168 2015 Ford F550 1250 Deluxe PRT (950/300) HXL4, DC10, Hannay \$84,000

**Monthly Payment: \$1386** 



Unit 1130 2015 Ford F550 4x4 1200 Standard PRT (900/300) HXL4, FloJet

\$86,500

Monthly Payment: \$1427



2014 RAM 5500 4x4 1500 Standard PRT (1100/400) HXL4, DC10, Hannay \$84,900

Monthly Payment: \$1400



Units 1303, 1425 2015 Ford F550 1500 Deluxe PRT (1100/400) HXL4, DC10, Hannay \$103,000

Monthly Payment: \$1699



2015 Ford F750 2000 Deluxe PRT (1500/500) HXL4, DC10, Hannay \$103,700

Monthly Payment: \$1711



2015 Freightliner M2 2000 Deluxe PRT (1500/500) HXL4, DC10, Hannay

\$105,900

Monthly Payment: \$1747



2015 International 4300 Cummins 2000 Deluxe PRT (1500/500) HXL4, DC10, Hannay \$108,500

Monthly Payment: \$1790



2015 Hino 268A 2000 Deluxe PRT (1500/500) HXL4, DC10, Hannay \$109,800

Monthly Payment: \$1811



2015 Kenworth T270 2000 Deluxe PRT (1500/500) NVE304, DC10, Hannay \$114,200

Monthly Payment: \$1884



2015 Kenworth T270 2000 Deluxe PRT (1500/500) HXL4, DC10, Hannay

Phone: 855-805-7183

# NATION'S LARGEST SOURCE OF IN STOCK VACUUM TRUCKS



## SEPTIC, GREASE AND VACUUM TRUCKS





2015 International 4400 N9 2500 Gallon VAC HXL15V

# \$116,700

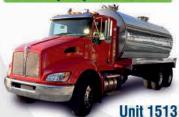
Monthly Payment: \$1925



2015 Hino 338 2500 Gallon VAC NVE607

# \$131,500 PLUS FET

Monthly Payment: \$2169



2015 Kenworth T370 3600 Gallon VAC HXL400WV

# \$139,900 PLUS FET Monthly Payment: \$2308



2015 International 7500 N10 4200 Gallon VAC NVE866

## **OILFIELD SERVICE TRUCKS**

# \$349,000

Monthly Payment: \$5758



#### Unit 1115 Straight Vac

2015 Kenworth T800 4800 gallon stainless steel DOT 407 hoist and door NVE5314 1600 cfm blower





#### Unit 1118 ComboVac

2015 Kenworth T800 3200 gallon stainless steel DOT407 hoist and door 800 gallon water NVE5314 1600 cfm blower Hotsy 9314 boiler CAT660 water pump

# Providence Providence Providence Raleigh A Raleigh Dallas ★

#### FIND OUR DISTRIBUTORS IN:

Kansas City, KS
Portland, OR
Modesto, CA
Phoenix, AZ
Denver, CO
Minneapolis, MN
Dallas, TX
Miami, FL
Raleigh, NC
Providence, RI

www.flowmark.com



Marty Martin is a director and an associate professor in the College of Commerce at DePaul University and author of the book *Taming Disruptive Behavior*. Reach him at www.drmartymartin.com.

# **Keeping Your Staff Focused**

Workplace distractions can sidetrack employees from doing their jobs, but managers can minimize the diversions By Marty Martin

s managers know all too well, workday distractions are everywhere, stealing your employees' precious time and productivity. Between new technologies that beg for people's attention to the prevalence of shortened attention spans, everyone on your team may be more distracted today than in the past. Of course, being distracted at work creates numerous problems, from missed opportunities to strained business relationships. Therefore, you need to manage employees effectively to minimize their distractions.

First, realize there are two categories of distraction: internal and external. Internal distractions include any physiological, emotional, attitudinal, biological or physical discomfort. Examples include having an upset stomach or a headache, worrying about a personal matter, feeling overwhelmed with tasks, sitting in an uncomfortable chair, experiencing anger toward a co-worker or grieving a loss. Any of these situations can quickly take an employee's attention away from his or her tasks.

External distractions involve other people and technology. Some examples are social media and text alerts ringing on a smartphone, email notifications popping up on a computer screen and other employees who talk loudly in the office. These seemingly innocuous items easily divert people's attention.

The real challenge is that most employees aren't experiencing just one or two of these distractions. They're facing work interruptions on a daily basis.

On top of all the internal and external distractions, organizational structures have changed over the years, packing more duties and responsibilities into every job description. That means your employees today have to spread their attention thin just to complete their expected workload. With all of these factors, it's no wonder so many people feel distracted at work.

Fortunately, most distractions can be eliminated from the workplace if you take the time to manage them. Here's how.

#### Design or redesign a job from a distractibility point of view.

It's natural for a manager to blame the employee for becoming distracted, saying things like "He's not a team player," "She's not motivated" or "He doesn't work well here." The manager may even reprimand the individual for poor performance. But before going that route, take a good look at the job and environment to see if it's making the employee distracted.

What are the job duties, both the ones explicitly stated in the job description and the ones that person just always seems to do? What's the working environment like? What visual or auditory distraction triggers are present? How is the office set up? Is the lighting, the chair and the desk layout conducive to good work habits? What other factors impact the employee's efficiency, effectiveness and performance?

If the work environment and the job are poorly designed, the talented individuals you bring in will continue to struggle, perhaps not because of

their habits but due to the bad design. Therefore, before you reprimand, analyze! What you find may surprise you.

#### Create a distraction elimination plan.

Think back to your elementary school days. You likely had a few kids in the class who always bothered others, threw spitballs or just stared out the window for hours. What did the teacher do? She had a plan. If the kids were disruptive to the class, she'd move them up front near her. If they were window gazers, she'd position their desks so they could no longer see the window. No matter what the disruptive behavior, she knew what to do because she had a plan in mind for it.

Good managers do the same. They sit down with the distracted employee and together create a distraction elimination plan (DEP). By working together, they may decide on some physical changes in the office that can help, such as moving to a new cubicle or changing the lighting, or they may figure out strategies the employee can use to maintain focus, such as not having an email program always open or disabling smartphone alerts.

The great thing about a plan is that it provides concrete references and is used as a benchmark to gauge progress. Additionally, all organizations have risk management plans, strategic plans, operational plans and business plans, so why not also have distraction elimination plans?

#### Offer other resources when needed.

Sometimes, even with the manager's help and a solid DEP in place, the employee is still distracted. In these cases, the manager has to know when to offer additional resources. If your business has an employee assistance program, you may want to consider making a recommendation to an appropriate resource or service.

If you don't have a formal program, present the idea of additional help in a supportive and neutral fashion. You could even suggest it as a step in the DEP: "If the outlined steps in this plan don't resolve the issue, then the employee will seek outside assistance in the form of a counselor or therapist." The key is to help the employee find the needed resources to determine the seriousness of the distraction.

#### **NO MORE DISTRACTIONS**

The next time you notice employees who are underperforming, don't immediately reprimand them. Instead, take the time to determine if there's something you or the company can do to remove the distractions from the workplace. Distractions don't have to be a major part of the workday. You can help minimize them. Remember, the fewer distractions people have, the more productive they'll be.  $\blacksquare$ 



# Viztrac® AM100-100

# J/E4040HA-CKIT2





BUY BOTH 2895-00

6 Months, No Interest!



Get 6 Months to Pay on Purchases of \$99 or More.

Choose Bill Me Later® at Checkout. Subject to Credit Approval.





# While our competitors are busy looking at us, we're busy listening to you.

Time and again, our designs send the competition running back to the drawing board. Innovations that continue to baffle the competition – it's our way of knowing we offer you the most advanced vacuum trucks available today.



Volume and Flexibility







Long Routes, Large Capacity





Compact Full Service Body





☑ Pickup Beds ☑ Flat Decks ☑ Trailers

pickuptanx

Maximum Value, Maximum Service, from the Leaders in Vacuum

vacutrux.com

TOLL FREE US AND CANADA:

1-800-305-4305



# The "Simply Better" choice for tanker and truck mount vacuum.

Forget complicated vacuum pump designs. Choose the rugged and dependable Wally for longer service life and lower maintenance. Quality built to outperform. Precision manufactured for higher vacuum levels... and largest displacement design for maximum air flow.



SANITATION

Reliable commercial duty in a compact package

Problem Free Time after Time 302

SEPTIC

Heavy duty truck mount vacuum solutions

Dual Cooling
Liquid and Air





#### **DDUSTRIAL**

For the largest tanks and loading lines.

Huge Air Volume at Low RPM Operation 1054 1604 2106

Available from Leading OEMs Made in Canada Since 1969



**Syallenstein** 

pumps · blowers

**EM** elmira machine industries inc.

**1-800-801-6663** wallenstein.com



- LEVER GATE STEM GATE BALL VALVES
   VACUUM/PRESSURE RELIEF SIGHT EYES
   FLOATS• TANK SAFETY COMPONENTS
- elmira machine industries inc.

1-800-801-6663 info@elmiramachine.com





Revolutionary, self-closing hinges that operate from an internal stainless steel spring



Heavy-duty, easy-to-use rotary latch that can withstand the roughest users



Deep, ambidextrous door pull provides a better grip and ultimate convenience



Re-engineered door frame which features a single jamb point for maximum structural integrity

Portable Restrooms | Hand Wash Stations | Deodorizers | Cleaners | Trucks











# Washington state wineries may be scrutinized for waste disposal processes

#### By Doug Day

he Department of Ecology in Washington state is looking at regulatory changes due to the growing number of wineries in the state. According to the agency, every gallon of wine produced results in 6 gallons of wastewater. While the DOE says the industry has done a good job in general handling the wastewater, it is concerned many smaller wineries are disposing of wastewater in domestic septic systems, which aren't designed for these waste streams. The largest wineries have individual wastewater discharge permits, and the DOE is drafting a general permit for smaller operations. Draft regulations are expected in July with a final regulation to follow in November for public comment. Final adoption is scheduled for March 2016. Agency representatives briefed the industry at the February meeting of the Washington Association of Wine Grape Growers and plan to survey wineries through the association.

#### Colorado

A proposal to repeal a ban on the purchase and installation of "non-efficient" faucets, shower heads, flushing urinals and tank-type toilets failed by a 6-4 vote in a committee of the Colorado Legislature. The ban, set to go into effect in September 2016, requires the use of fixtures that meet the U.S. Environmental Protection Agency WaterSense standards in new construction and renovations of residential, commercial, industrial and state-owned buildings. In criticizing the new rule, Colorado Rep. Tim Dore (R-Elizabeth) cited what he called the "Denver-centric view" of lawmakers. He said they overlooked the needs of rural areas with septic tanks, private wells or small water and sanitation districts that don't have the water pressure needed to make the fixtures feasible.

#### **Florida**

Two bills have been introduced to once again try to overturn Florida's ban on land-spreading septage waste, which becomes effective in January 2016. Passed in 2010, the ban was intended to protect the state's waters from nutrient pollution. Septic wastewater haulers and rural counties tried to change the law last year without success. Companion bills were introduced again in February in the state's House and Senate. Those who oppose the ban say land-spreading is important to rural counties as a fertilizer, noting that many rural areas don't have wastewater treatment plants or, if they do, they may not accept septage. The Department of Health reported in 2011 that about 40 percent of the state's septage was land-applied at 92 licensed sites. During discussions in 2014, the state health department said it would study the issue but has not issued a report.

#### **New York**

A group of town supervisors and village mayors on Long Island are calling for New York to form a \$100 million regional initiative to fund upgrades of cesspools and septic systems to advanced onsite systems. The East End Supervisors and Mayors Association, which represents local officials in Suffolk County, made their plea in a letter to Gov. Andrew Cuomo and state legislative leaders. Many properties on Long Island still use cesspools, and many septic systems are decades old. The group would like the state to offer \$5,000 rebates for homeowners who update their septic systems, saying it would result in updates to about 25 percent of the county's 81,000 onsite systems. Their proposal also calls for \$3 million for a nitrogen management and mitigation plan for the area, along with \$2 million to develop nitrogen standards.

#### Ohio

Some septic pumpers in Ohio are considering a class action lawsuit to overturn new state rules that went into effect in January. The 25 Akron-area pumpers object to having to inspect systems and submit reports to the local health department. The new rules were the result of seven years of discussion at the state level and cleared legislative review last fall, four years after legislation was passed requiring their development.

#### Texas

A Texas lawmaker has introduced a bill to grandfather all existing gravity flow septic systems and permit their use on properties of 10 acres or larger. Current state law requires gravity systems to be replaced with an aerobic system if a major repair is required. Texas Rep. John Wray (R-Waxahachie) had promised to submit the bill (HB 1301) during the 2014 campaign in which he was elected to his first term.

#### **New Hampshire**

Designers and installers in New Hampshire can now apply for septic system approvals online. The state Department of Environmental Services announced the Subsurface Systems Program ePermitting system in February. The online offering also accepts payment of fees with a credit card and allows the tracking of application status. The site address is des.nh.gov/onestop/subsurface-epermitting.htm. Registration is required, which can take up to five days for the department to review the license status of the installer.

# Industries, Inc.





- Cummins 240 HP engine
- Allison 2500 6-speed RDS automatic
  - Air brakes 25,999 GVWR
- 2,000 gal. aluminum tank
- Two compartment tank, 500 fresh water/1,500 waste
- NVE primary moisture trap
- NVE 20" top man way
- 4" waste discharge line with valve, adapter, and cap
  - Anti-surge baffles
  - · Heavy duty toilet carrier with trailer hitch



#### **2015 INTERNATIONAL 4300**

- Cummins 220 HP engine
- Allison 2500 6-speed RDS automatic
  - Air brakes 25,999 GVWR
- 2,000 gal. aluminum tank • Two compartment tank, 500 fresh water/1,500 waste
- NVE primary moisture trap
- NVE 20" top man way
- 4" waste discharge line with valve, adapter, and cap
  - Anti-surge baffles
  - · Heavy duty toilet carrier with trailer hitch



# **Call For Pricing**

#### **DODGE or FORD 4WD or 2WD CHASSIS**

- 950 Gallon (650X300) steel restroom tank
- Your choice of pump
- Fold down toilet carrier
   Heated or Non-Heated Available





# \$74,450

#### 2015 FORD F550

- 999 Gallon (749X250) aluminum restroom tank • Masport HXL4 • Flo-Jet washdown with 50' hose
  - Fold down toilet carrier



\$108,950



#### **2015 INTERNATIONAL 4300**

• 280 HP Cummins

• 2500 Gallon Aluminum Tank

• Allison 3000 RDS automatic

• NVE 607 380 CFM



#### 450 Gallon Aluminum Slide-In

#### 300 Gallon Waste/150 Gallon Fresh

Electric Start 5.5 HP Honda, Condé Super 6

vacuum pump w/4-way valve 30'x2" Tiger Tail
inlet hose w/stinger, washdown system w/50'
hose, 3" discharge, 12V battery & work light

\$8395



#### **Side Engine Style**

950 Gallon (650/300), Aluminum Slide in, Flanged and dished heads, Condé SDS6 (115 CFM), Honda 9 HP Electric start, 30" tiger tail hose with valve and wand,

50" wash down hose, COMPLETE AND READY TO WORK

\$16,495

Keellacindustriesis
proudto announce
Sturgeon Tankis
nowour authorized
Canadian Distributori

Quebec, PC Ontario, ON Calgary, AB Moncton, NB

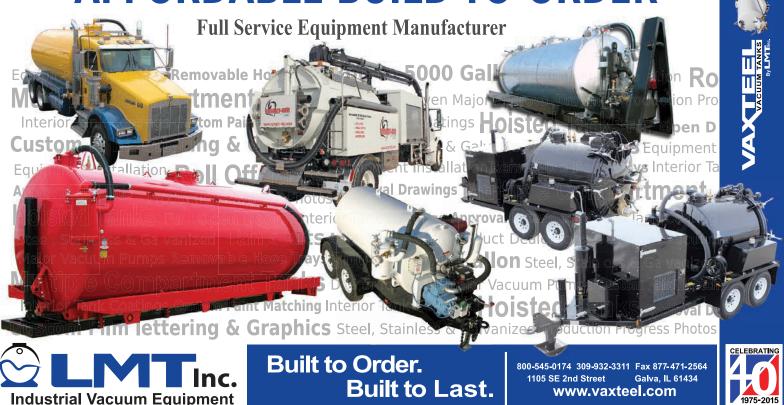


Denver, CO Bellefonte, PA Kansas City, MO Orlando, FL

866.789.9440 www.keevac.com

P0515

# **AFFORDABLE BUILD-TO-ORDER**





The Best Thing For The Septic Industry Since The Vacuum Rump?

Clears Septic Line from tank to house in seconds without need of snaking or jetting

Pump out leach fields from Outlet Pipe or T Baffle

Pays for itself in as little as 2 uses

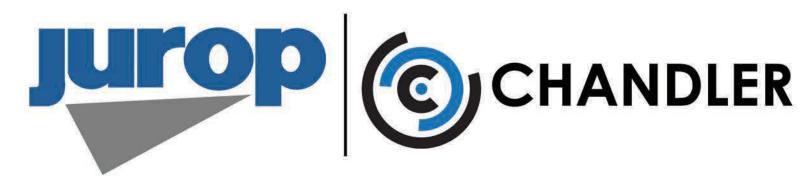
**Field Tested** 

Works 99 out of a 100 times

Check our Web site for Demo and Testimonials

www.klearitkone.com 603-693-2033

100% money back guarantee (Less Shipping & Handling)

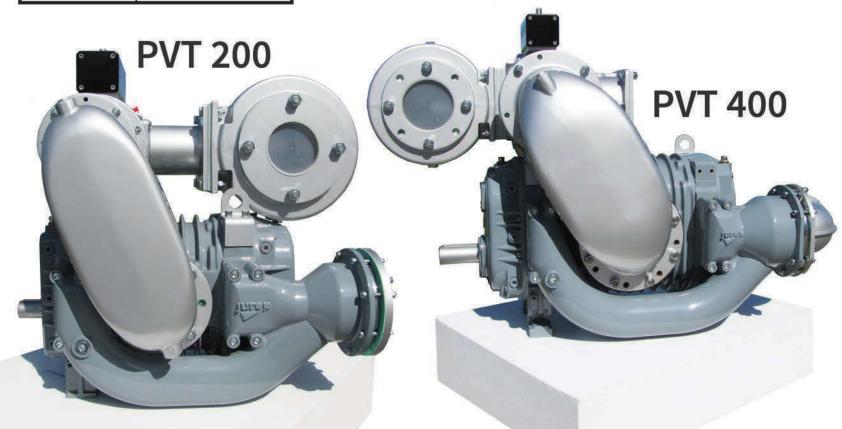


## **PVT TRI-LOBE BLOWERS**

innovative design with unmatched performance

PVT MODEL	CFM @ FREE AIR
PVT 200	795 CFM
PVT 280	1060 CFM
PVT 400	1500 CFM
PVT 700	2440 CFM
PVT 1000	3710 CFM

- · Air injection cooling
- Compact manifold design for easy installation
- Innovative noise reducing manifolds for quiet operation
- · Long lasting, high temperature labyrinth seals



## PUMPER PROFILE Brent Gale and his son, Joshua, provide pumping and portable sanitation services for Goodwin Septic Tank Service in Grand Junction, Colorado. They are shown with a 2008 International 4400 with a Progress aluminum tank and a Masport oump, built out by KeeVac Industries and lanson Equipment. (Photos by Joseph Gamble) DEWATERNG PIONEERS Goodwin Septic Tank Service Inc. stayed ahead of regulations with an innovative disposal facility on Colorado's Western Slope By Mary Shafer n 1977 when Brent Gale inherited his father's business, Goodwin Septic Tank Service Inc., in Grand Junction, Colorado, the West wasn't exactly wild and woolly anymore. But local industry regulations at the time were, to say the least, unsettled. Gale's prescient reading of the direction things were heading concerning septage, grease and sand disposal led him to take matters into his own hands. Early experiments with dewatering and self-reporting gave Goodwin an edge when local government finally tightened restrictions, leaving many competitors in the lurch. FAMILY TRADITION Gale began working for his father, LaVoy Gale, and **Goodwin Septic Tank Service** his 22-year-old septic pumping firm in 1970 after getting **Grand Junction, Colorado** out of the Army. At that time, there were very few grease traps and car washes in the area, but the father-son team serviced what there was using a 1963 Ford 1-ton dually car-**OWNERS: Brent Gale and Uvonne Gale** rying a 650-gallon tank. A couple years later, they expanded FOUNDED: 1948 Colorado their business to include installing and repairing septic sys-**EMPLOYEES: 7** "Dad put me on a backhoe for the smaller jobs, digging MARKET AREA: Western Colorado and off lids," Gale remembers. He gradually learned to install eastern Utah drainfields. **SERVICES:** Pumping septic tanks, grease traps, When LaVoy Gale passed away in 1977, the younger irrigation holding tanks, car wash pits, oil/water separators and

other nonhazardous waste; septic system locating; portable sanitation

**AFFILIATIONS:** Grand Junction Chamber of Commerce,

Better Business Bureau

WEBSITE: www.goodwinseptic.com

(continued)

Gale took over the company. As Grand Junction grew, there

was more business pumping restaurant grease traps and

car wash pits. As more people started moving outside the

city, many septic systems were installed and serviced.

## 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 warranty standard. Tank options can be added before delivery.



## Peterbilt Model 348 with 4000 Gallon Aluminum Vacuum Tank

Automatic or standard transmission. 4000 gallon Pik Rite aluminum tank. Liquid cooled pump. Aluminum hose trays. Tank options can be added before delivery. Two stage engine brake included.



Peterbilt Models 365 with 4700 Gallon Water Trucks

All triaxle, MX 485HP, 8LL and 18-speed transmissions and Peterbilt Air Trac suspension. Tank options can be added before delivery.



Contact us today for more information on these or other models.

877-661-4511



rushrefusesystems.com

Right: The Goodwin Septic Tank Service team includes, from left, David Kligora, Joshua Gale and daughter Kylynn, Brent Gale, Jim Fine and Dwayne Miller. They are standing in front of an International truck with a Progress aluminum tank and Masport pump, built out by KeeVac Industries and Hanson Equipment.

**Below:** Brent Gale pauses while working on the computer in his office.





As with many states in the American West, an attitude of fierce independence kept Colorado regulations rather lax for many years. For a long time, Goodwin disposed of its treated septage through land application on area farm fields.

"Then it was decided we should dump at a landfill, but that got to be a mess with too many people using it," Gale remembers. "So then we moved to the municipal sewage treatment plant, but people complained about odors. We went back to the landfill for a few years to dump our sand, grease and septic. But that was a solid waste disposal dump, so we were sent back to the treatment plant once they had a place for us to use that wouldn't smell."

## **LOOKING FOR ANSWERS**

With all the back-and-forth, Gale saw the writing on the wall. With Goodwin's business including more and more grease traps and car washes, he knew it was only a matter of time before the treatment plant would give him a hard time.

"I figured they wouldn't appreciate our sand loads, so I came up with a plan for us to dewater those loads here on our site." Gale's foresight paid off: When the plant said they'd no longer accept grit-laden loads, Goodwin was ready.

In June 1987, Goodwin received a tentative permit from the Mesa County Health Department to experiment with dewatering. "They said I'd eventually have to get a state health department certificate, so I started issuing reports," Gale says. These reports included U.S. Environmental Protection Agency toxicity tests for heavy metals, oil content and VOCs, though toxicity was the only requirement at that time. He wanted to stay ahead of the game and get that certificate before it was required, but was told he would need state approval.

He called the state, which said he needed a Certificate of Designation

(continued)

## Evolution of a sideline

In 2002, Brent Gale, owner of Goodwin Septic Tank Service, purchased a small portable restroom business that had just become available after its original owner retired. Gale looked around at Grand Junction – already the largest city on Colorado's Western Slope – and saw there was a market to service the sanitation needs of local construction companies.

His daughter, Sheila Gale, had shown interest in the family business, so she was put in charge of that part of the operation. The company bought 20 Satellite Industries standard units to spruce up the existing unit inventory, and she began building the portables division. By 2005, business had expanded enough to justify an inventory of 100 units.

Sheila decided to get married and leave the business that year, and David Kligora, husband of the company's secretary, took over as the manager and driver. Soon after, the construction industry went into overdrive, and the portables inventory soon doubled. Three frenetic years later, the recession hit. Building dried up and the region's oil-drilling rigs moved to North Dakota.

"We haven't recovered fully," says Brent Gale, "but we're leveling off at about 47 percent of what we were bringing in previous to that."



Portable sanitation has become a valuable sideline for Goodwin Septic Tank Service. Technician David Kligora is shown moving PolyPortables restrooms in the company yard.

The portables division is still a significant contributor to that bottom line, maintaining a 200-unit inventory. Currently Goodwin fields 150 Poly Standard units for everyday use such as work sites; 40 more reserved for special events; four Enhanced Access Units; and 10 Super Twin hand-wash stations, all from PolyPortables.

The Goodwin crew converted six no-name, ATV trailers for rolling restrooms used by local highway departments. They added legally required lights and license plates, then bolted on a tan PolyJohn standard unit to each.

## TODAY'S ONSITE WASTEWATER TREATMENT IS NOT BLACK AND WHITE,

IT'S GREEN



Norweco's mission is to manufacture the most effective products with the greatest value for our customers. The award-winning SINGULTIR GREEN tank is certified to NSF/ANSI Standards 40 and 245. Easily installed at even the most difficult jobsite, the treatment system offers single tank convenience, energy efficient operation and simplified service for long term performance.

Contact us today at 1-800-667-9326 or email@norweco.com

220 Republic Street, Norwalk, OH, U.S.A. 44857

www.norweco.com

## The mystery of the green wastewater

About 18 years ago, Goodwin Septic Tank Service got a call from the Grand Junction Fire Department's environmental specialist. Someone had reported unidentified green water running into the river from a storm drain. "They had a place where they could shut the water off, but the valve continued to leak," remembers owner Brent Gale. "We were called to vacuum up the green water from the pipe and from where the green stuff had settled into the Colorado River."

There were endangered fish and other protected species in the river, so the report had attracted a good deal of attention. When Goodwin's team arrived on site, they met representatives from the Mesa County Health Department, the city's wastewater treatment plant and several other official agencies.

"They didn't know what the green liquid was, so the sewage plant wouldn't take the load," Gale explains. "So we had to take it to our facility." Upon further investigation, it was discovered that a small business in the downtown area was reclaiming antifreeze. Part of that process was dyeing the new product green, and that dye was washing down the drain of his shop in an old part of town that was still using a septic tank.

The floor drain was tied into the legacy tank, which was, in turn, tied into the municipal storm sewer. Whenever the shop floor was washed, the dye ended up in the storm drain and eventually entered the river at the outfall in question.

The shop owner explained that there was nothing toxic in the dye, and in fact it was the same colorant Chicago uses to dye its river green for St. Patrick's Day and what is put into carrier-based military aircraft to form a color slick that makes it easier to find if they ditch. Still, he was cited for improperly tying into the storm sewer.

Goodwin had pumped the shop's tank, and investigators wanted records of the disposal from that material. "We called back a half-hour later to say we had them," Gale recalls. "They were surprised we had them so soon." At that time, Goodwin kept paper records, but their filing system allowed them easy record retrieval. They have since moved to computerized QuickBooks for billing, which also allows the attachment of photos, notes and other pertinent information.



Technician Dwayne Miller empties a load of car wash pit waste into a 10,000-gallon tank for settling. When the waste is dewatered, a backhoe is used to convey the solid material to an impervious drying area. The Peterbilt vacuum truck was built by Bay State Truck and Trailer and carries a Masport pump.

from Mesa County. "It took five years of going back and forth between the two, because neither one really knew which had jurisdiction since there were no regulations for dewatering," he recalls. "They put me under their solid waste division, even though ours was liquid waste."

Goodwin had clearly become a kind of test case and a catalyst for development of Colo-

rado's waste regulations. "I had been sending them reports and they'd say, 'Why are you sending this? We don't need this information."

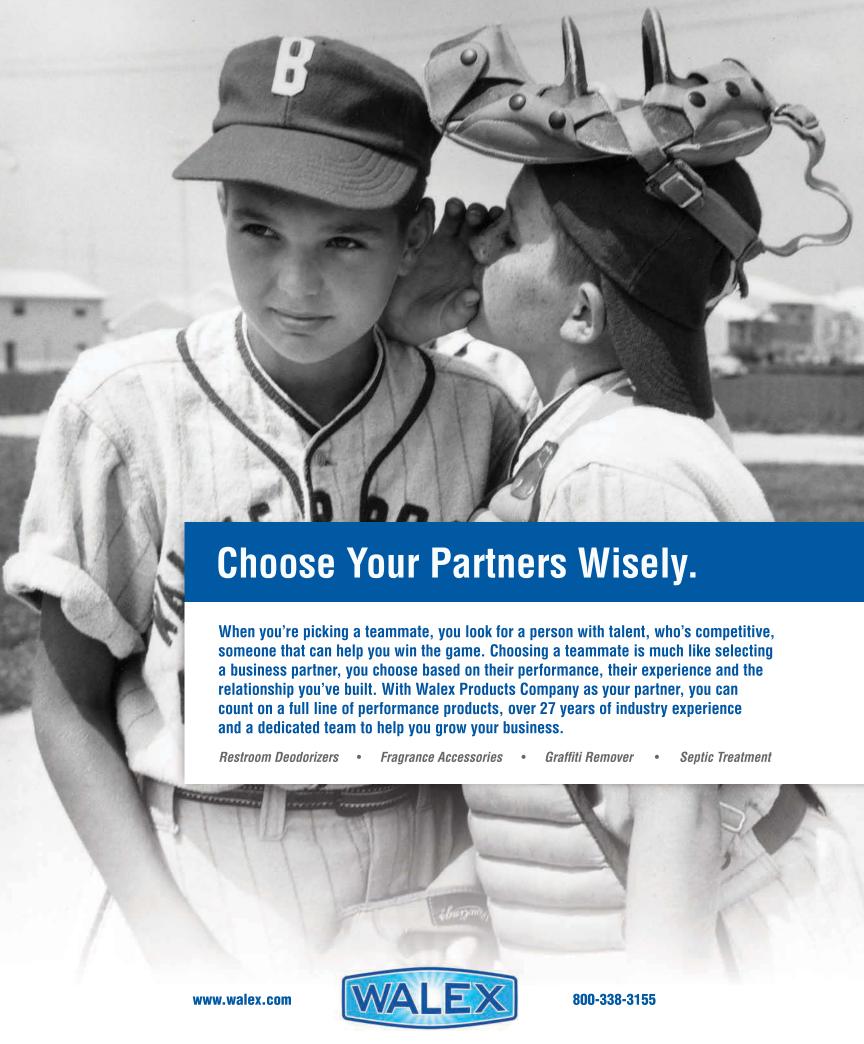
One thing local regulators did know was that they wouldn't allow the location of Goodwin's dewatering operation on the company's property inside city limits, so Gale moved his business to a 100-acre property outside of town. He got the permit for his dewatering plant in 1996 and opened it up to process pumping waste from grease traps, septic tanks and sand pits.

## **DEWATERING PROCESS**

Goodwin's dewatering process begins in a large tank, about 10,000 gallons, into which sand trap waste is dumped. There are two compartments inside, which slows the flow to allow settling. When the dewatering tank is full, it's cleaned out with a backhoe, with the material dumped onto an off-load area, under which an impervious plastic liner protects local groundwater.

The material is dried by spreading it on a 2-acre drying pad, which (continued)







holds 3 feet of soil on top of a mandatory 40 mil plastic liner to protect groundwater. Grease trap waste is spread on the soil and incorporated using a tractor pulling a disc attachment. Finally, treated dewatered septage is added and simi**Right:** Technician Dwayne Miller pumps one of many car wash pits maintained by Goodwin Septic Tank Service.

**Above:** After dumping a load of car wash pit waste, Miller opens the rear hatch and uses a rake tool to reach in and scrape out residue.

larly mixed. This material eventually breaks down into topsoil, but must stay on the drying pad for about a year before it can be moved to another part of the plant.

Water from the big tank is decanted into a 6,000-gallon, three-chamber settling tank to capture oils. It is discharged about 50 feet through a 6-inch PVC pipe by gravity to a half-acre lined pond, where it evaporates. In a 2,000-gallon oil/water separation tank fabricated from a gasoline storage tank, the oils are skimmed off and shipped along with oils from sand traps – collected and separated in distinct loads – to a refinery. Mixed with solvents, the oil wastes

I don't intend to make any changes to the core of what we're doing. There's the possibility of growth, but that's not necessarily what's going to happen. Sometimes bigger isn't better and just gives you more headaches.

- Joshua Gale

are fine-sprayed onto coal at a nearby mine, which helps it burn better for the coal mine's power plant custom-

"We now process a combined volume of about a million gallons a year, including loads from a lot of the ski areas around Aspen," Gale says.

Goodwin's plant occasionally accepts other pumpers' loads on an as-needed

basis. Goodwin fills out a VOC and toxicity test and issues a nonhazardous waste manifest for each load. Other required forms include a grease transporter permit, a grease transporter bond and a waste grease facility permit. Reports are filed quarterly with a tipping fee, and once a year Goodwin must report how many grease traps it serviced, how many gallons of septage and grease were pumped, and how these loads were disposed of.

## **A FIT FLEET**

Gale now works with his son, Joshua Gale, who joined the company in November 1998, after his service in the U.S. Navy. He helps his father manage a vacuum truck fleet that has grown to include a 2005 and a 2006 Peter-

bilt 335 rig, each with a 3,600-gallon Progress aluminum tank with hydraulic lift, full-open rear hatch and a liquid-cooled Masport HXL-400 pump. The units were built out by Bay State Truck and Trailer.

These are joined by a 2008 International 4400 with a 2,800-gallon Progress aluminum tank and a Masport HXL-400 pump, built out by KeeVac Industries and McCandless Truck Center (formerly Hanson Equipment). A 1988 GMC with a 2,200-gallon steel tank and a Jurop/Chandler 260 pump was built out by Wee Engineer (previously featured in the Pumper Classy Truck section) and a 1987 Mack with a 3,600-gallon steel tank, hydraulic lift and full-open rear hatch that has a Demag Wittig H7-5V hydraulic pump (Gardner Denver) and was built out by Cusco.

A 2006 GMC 5500 4x4 built out by Crescent Tank with a flat 600-gal-

lon waste/250-gallon freshwater steel tank and Masport pump is used for portable sanitation. A 1996 GMC 3/4-ton 4x4 pickup carries a steel slide-in tank from Satellite Industries with a capacity of 250 gallons of waste and 150 gallons of freshwater.

## WHERE DO WE GO FROM HERE?

Brent Gale says he owes his success to the people who work for him. "The greatest asset is the people who work for me," he says, explaining that few of them have been with the company for less than a decade. His son concurs and says he's learned how to appreciate his employees by watching his dad.

When asked about a succession plan, Joshua Gale says, "We'll pretty much keep doing what we're doing until my dad decides to hand off the business or can't work any-

more. I don't intend to make any changes to the core of what we're doing. There's the possibility of growth, but that's not necessarily what's going to happen. Sometimes bigger isn't better and just gives you more headaches."

Joshua Gale has three daughters, and the oldest, Kylynn Gale, 12, is beginning to show interest in the business. "She likes to go with me to pump grease traps and on truck runs," he says. "Maybe we'll have a fourth generation of Gales at Goodwin." ■

## **MORE INFO**

**Bay State Truck and Trailer, Inc.** 508/336-9600 www.baystatett.com

Jurop/Chandler 800/342-0887 www.chandlerequipment.com (See ad page 37)

Crescent Tank Mfg. 585/657-4104 www.crescenttank.com (See ad page 3, Midwest & Eastern Supplement)

800/490-3541 www.wastequip-cusco.com

**Gardner Denver** 217/222-5400 www.gardnerdenverprodu<u>cts.com</u>

**KeeVac Industries, Inc.** 866/789-9440 www.keevac.com (See ad page 35) Masport, Inc. 800/228-4510 www.masportpump.com (See ad page 3)

**PolyJohn Enterprises, Inc.** 800/292-1305 www.polyjohn.com (*See ad page 107*)

PolyPortables, LLC 800/241-7951 www.polyportables.com (See ad page 33)

Progress Tank 816/714-2600 www.progresstank.com

Satellite Industries 800/328-3332 www.satelliteindustries.com (See ads, pages 2, 18-19)

Wee Engineer, Inc. 877/296-2555 www.wee-engineer.com (See ad page 90)



SchellVac Equipment Inc. 126 Wheatfield Road Box 108, Group 200, RR2. Winnipeg, MB - R3C 2E6 T: (204) 336 0081 F: (204) 336 0090

Toll Free: 1 877 336 0081

www.schellvacequipment.com



## Septic Trucks



Combination Hydrovac Trucks



Equipment that works as hard as you do

Industrial Vacuum Trucks

## A DIAMOND IN THE ROUGH





tested 3-point mounting system and remote mounted vacuum system parts, adds life and serviceability to any project. Equipped with a

direct driven vacuum system, the Princess II keeps you up and running by eliminating any unexpected service time needed to change right angle drive couplings. The 1500-gallon carbon steel tank and rugged diamond plate body of the Princess II offer dependability, quality, and style for any job.

800.334.8237



Call Lisa today!



OFFERING A COMPLETE LINE OF JANITORIAL SUPPLIES. CLEANING PRODUCTS, PORTABLE TOILET & SEPTIC NEEDS

250 Old Marlton Pike • Medford, New Jersey 08055 800-699-9903 www.delvel.com





Portable Restrooms Roll-Offs Septic Sewer/Drain

• Grease Traps • Rendering



## >>> WHAT WE OFFER:

- > Route Optimizing
- ) Dispatching
- Billing
- Customer Accounting
- > Inventory Control
- > Service Reminders

{ \*LESS EXPENSIVE & more features than our competition! Local, WAN, LAN, or Cloud.

## >>> CHOOSE FROM 5 EDITIONS:

Lite: \$17/mo Plus: \$37/mo\* Pro: \$84/mo

Deluxe: \$141/mo Premium: \$204/mo

Watch demos online or call for personal tours!

\*Single-User Price. One time payment plan also available.

Ritam Technologies, LLC

Sales: USA 800-662-8471 Int'l 925-478-

## Don't get caught in a jam





The only patented V-Slice cutter technology.

Setting the new standard in grinder pump performance.

## Liberty Pumps





800.543.2550 libertypumps.com

7000 Apple Tree Ave. • Bergen, New York 14416

Single stage and 2-stage models Heads to 185



## PARTS? HURRY UP. DON'T WAIT.



Tired of playing "hurry up and wait" when you need genuine OEM parts? Well, your options for getting parts just got a whole lot better. With **Go To Parts**, you'll not only get the right part, you'll get it fast.

We've combined ultra-fast shipping with simple ordering and product-savvy customer service folks to provide the solution you've been clamoring for. Genuine OEM parts for tarps, hoists, compactors, vacuum trucks, containers, carts, and more.

Because it's go time, not down time.

Toll Free: 844-GOTOPARTS www.gotoparts.com



Get parts, not excuses.™

## You're Due For a Pumping

What's the best procedure for sending out service reminder cards?

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 have recently joined my father's septic service business and have been tasked with implementing a new customer database. We already have a software program covering all of our accounting activities. We are just looking for something that has the ability to recognize when customers are due for their next service and potentially print out a reminder card for us to send in the mail or email the customer directly. Does anyone have advice or recommendations?

ANSWERS: When I do a job, I recommend to the customer when it is next due, and put a number in front of their address in the workbook records. Most of my customers are annual, two or three years. I simply put a 1Y, 2Y or 3Y in front of their address. I work on the reminder cards in the winter months when business is slow.

I try to write a short note on the card by hand, because I have found over the years that adding this small personal touch increases the response. Your customers can tell that you actually spent a little time to remember them, and not just simply pushed a button on your computer. I usually address it to the customer or current resident – just in case they moved and I did not know it. Then the reminder will go to the new owner, instead of forwarding it to the old owner, or return it back to you.







- · Stainless steel motor enclosure & legs

\$425.00 YEAR WARRANTY

### Replacement for Multi-Flo Aerator

All original equipment manufacturer's names, drawings, and part numbers are used for identification puposes only, and we are in no way implying that any of our products are original equipment parts. Not associated with Multi-Flo or Consolidated Treatment Systems.

## **BULLET** TM HIGH HEAD **FILTERED EFFLUENT PUMPS** 18-Month Warran All stainless steel construction built for years of dependable service · 1/2 HP, 10 amp motor

- Prewired 15-foot power cord



Models: BP12 (12 gpm) ... \$280.00 BP20 (20 gpm) ... \$280.00





## **New High-Torque Performance**

We've increased motor torque and adjusted shaft length to provide greater aeration.





## FFATURES.

- · Motor is fully enclosed · Prewired
- · 7-amp mini-breaker
- · Powder coated steel brackets w/ rubber vibration restrictors
- · Stainless steel shaft w/ bronze counter shaft
- · High impact plastic suds diffuser & aspirator tip





## **AERATORS**

Superior choice for new installation or upgrading existing 60/80/100 models.

2-Year Warranty

## **Whirlwind Linear Air Pumps**

Models:

STA40 ... \$199.00 STA60N ... \$220.00 STA80N ... \$250.00

STA100 ... \$340.00

## VHIRLWIND

"N" models include hose bib for low pressure alarm connection.

## WHIRLWING Whirlwind STA80AL **Linear Air Pump**

Integrated audible alarm & warning light with toggle testing switch. 2-Year Warranty

REGENERATIVE

**BLOWERS** 

STA80AL ... \$320.00

## **ALARMS · TIMERS** CONTROLS









\$95.00



## TO TRANSPORT **SOME OF THE W**ORST STUFF ON EARTH, **YOU NEED** SOME OF THE BEST STUFF.



It can be scary transporting environmentally damaging waste.

Any slip-up can hurt the environment - and your bottom line. You need to feel secure that your equipment does its job as well as you do. At Wastequip, we design and build sludge containers, vacuum boxes, dewatering containers; Galbreath hoists, trailers; and Pioneer tarping systems that perform like no others.

They're the best products for the worst stuff on earth.

To find a dealer near you, visit www.galbreathproducts.com/dealer-locator



## Rolling Out the Welcome Mat

After losing big industrial customers, a Pennsylvania treatment facility caters to liquid waste carriers with a new, efficient receiving station and sees the flow numbers come back

## By Ted J. Rulseh

rivate trucked waste haulers are playing a role in the renaissance of a Pennsylvania treatment plant that experienced a drastic reduction in industrial wastewater flow over the years. And administrators at the Delaware County Regional Water Control Authority (DELCORA) facility place great value in the haulers' business.

Prior to 2005, the agency lost wastewater flow and revenue at the Chester, Pennsylvania, plant as major industries closed down or curtailed operations. Rather than load more capital and operating costs on remaining ratepayers, including homeowners, waste haulers were targeted to help make up for the losses. Today, that business generates millions in revenue at the authority's 50 mgd (design) activated sludge treatment plant.

The agency has worked with haulers of septage, grease and other wastes to design a new, state-of-the-art receiving station and find ways to make truck off-loading faster and more convenient. The business team wants to treat pumping customers with a respect they might not always feel they get at a municipal plant.

"Unfortunately, many municipalities I've seen act as if they're doing the haulers a favor, instead of the other way around," says Mike DiSantis, director of operations and maintenance.

And the facility has been able to offer disposal rates it considers competitive: Haulers pay less than 2 cents per gallon to dump septage, 6 cents per gallon for grease trap waste and an average of 3 to 5 cents per gallon for other sludges.

DiSantis and Chris Lenton, human resources specialist and leader of the agency's Trucked Waste Team, talked about how the program worked with haulers to create an operation that is beneficial to the authority and the private pumping companies.

## **Pumper:** What was the impetus behind raising the profile of the trucked waste business?

**Disantis:** When this plant was originally built, it had more industrial than residential flow. One oil refinery and one paper mill alone comprised more than 28 mgd, and there were other industries, as well. Then, as has happened in other industrial areas in the Northeast, those flows declined. At the end of 2012, an oil refinery closed suddenly, taking away 4 mgd of wastewater that we used to treat. The paper mill at one time had 11 paper machines and was sending 15 mgd; they are down to three paper machines and send us 4 mgd.

Because in terms of residential development this area is pretty much grown out, we had to find new ways to replace that lost revenue, or our remaining ratepayers would have to cover all of our fixed operating expenses, plus all the capital costs required to keep a 40-year-old facility going. The



revenue stream from trucked waste helps offset that.

## **Pumper:** How did you go about expanding the trucked waste business?

**Disantis:** Ten years ago, the trucked waste business was languishing. We had a business, but no one was doing much to promote it or to help meet the needs of our hauler customers. We recognized

Business team members for the trucked waste receiving facility at DELCORA are, from left, Barbara Bonnett, Harry Bordley, Bernadette Bohn, Debbie Zetusky, Joe Centrone, John Berry, Chris Lenton, lan Piro, Mike Cherico, Robert Powell and Mike DiSantis. Not pictured: Mark Dorrin Jr. and Dan Dutton.

that we were under-loaded at an average flow of about 28 mgd. We formed a cross-functional business team that includes representatives from accounting, customer service, engineering, O & M and laboratory. We sat down and created a business plan and then went out and implemented it.

## **Pumper:** What happened to the trucked waste business volume as a result of the business plan?

**DiSantis:** The business started growing rapidly. We didn't have to lower prices, and we didn't have to make any drastic changes to what was already in place. At the end of 2004, we saw about \$280,000 in gross revenue from trucked waste. In 2005, which was the first full year we went at it full-speed, we jumped to more than \$800,000.

Paying closer attention to customer service and promoting the business really made a difference. We procured a customized software program to handle billing for the trucked waste business. We developed truck routes to help the customers. We offered incentives such as discounts to haulers. We provided a contact list so they could call us and get assistance with how to permit their wastes and their trucks. In 2013, we received \$3.57 million in trucked waste revenue.



## **Pumper:** How large is your service territory for trucked waste?

**Lenton:** We receive material from Pennsylvania, New Jersey, Delaware and Maryland. One customer occasionally comes up from Virginia.

**Disantis:** We have a great location, right off Interstate 95. I'd say the majority of the waste comes from a 60- to 70-mile radius around us.

## **Pumper:** What led to the creation of the new receiving facility?

**Disantis:** We recognized about two years ago that we needed to upgrade the receiving facility. We had three receiving areas in the plant, for receiving trap grease

and restaurant grease, for industrial and municipal sludges, and for all the other wastes – septage, industrial wastewater, holding tank waste, food processing waste and others.

We had seven ports piped in above ground. Once the haulers came in with their rigs, they had to sit in a queue, and then when it was their turn they had to back up into a spot. We came up with the idea of a facility that would look like the fuel islands at a giant truck stop. Haulers would pull in, unload, and drive straight out – there would be no backing up. Any size truck would fit, whether a tractor-trailer, a 10-wheeler or even a small six-wheeler.

We built a 10-bay receiving facility that allows our customers to unload a tractor-trailer in seven minutes. In the past we had been running upwards of 20 minutes to get some trucks out of here, and time is money to the haulers – they want to go in and out. When we opened the new facility [January 2014], we got resounding feedback on how much they appreciated it.

## **Pumper:** How exactly do the trucks empty their loads?

**Disantis:** We have a pump station at that end of the plant. We built a collection manifold that goes right into that pump station, which delivers the waste to the head of the plant. All they have to do is connect a 4-inch quick-connect hose, open a valve and they're unloading. At each connection there's

The trucked waste facility is designed for truck drivers' convenience. A drivethru configuration saves time.

the haulers' input. As we

developed the project, we

were constantly in contact

with the haulers to get

their ideas on what they

wanted in the design, what

their wish lists were, what

- Chris Lenton

would make

their jobs easier.

lighting, and they have water to wash down their hose. Everything is heat-traced for winter operation. We're doing another upgrade to our grease receiving area. Today, drivers have to pressurize to unload. In the new area, they will be able to unload by gravity.

## **Pumper:** How do you record the material received and how are haulers billed?

**Lenton:** Every load is manifested and sampled. We have a pretty tight monitoring program. Before a truck is allowed to unload, the driver comes into our receiving area, gives the receiver a manifest, takes a sample cup and goes out and gets a sample of the load from a sample port for testing. All manifests we receive from haulers are put into our sludge accounting system by the receiver. That information is uploaded to accounts payable.

## **Pumper:** What volume in trucked waste do you receive?

**DiSantis:** We average about 500,000 gallons per day, or about 15 million gallons a month, counting all three kinds of wastes. That's about 180 million

gallons a year.

## **Pumper:** Did customers have input to the design of the receiving facility?

**Lenton:** We had a basic design, but we sought the haulers' input. As we developed the project, we were constantly in contact with the haulers to get their ideas on what they wanted in the design, what their wish lists were, what would make their jobs easier. We even had one hauler who lent us one of his trucks and a driver to put the facility through the paces on a Sunday, before we finalized the design. We listened, and we couldn't be happier with the finished product. And the haulers are singing the praises of it.

## **Pumper:** How did you go about getting the haulers' feedback?

**Lenton:** It was a combination of small group and individual discussions. The haulers pretty much come in on a daily basis, so we had formed good working rela-

tionships with them. They feel pretty free to give us their unbiased opinions about whether something is good or bad.

## **Pumper:** What kind of outreach did you undertake to attract new customers and expand the business?

**DiSantis:** Our business team decided that we should be attending conferences, including the state and regional Water Environment Associations, the state Rural Water Associations and the Pennsylvania Septage Management Association. Some we attended once, some we attended a few times. That raised our profile and got people talking about us.

## **Pumper:** What steps do you take to sustain the business?

**Disantis:** I can't say enough about how important the relationships are. Many of the people on our team have built relationships with the customers, and that makes a difference.

**Lenton:** We hold hauler appreciation days, and we have a dinner once a year for the principals. That way they can meet all the people on the team and put faces with the names. We do things like that to keep the relationships fresh and on a social as well as professional basis. Customers seem to like that. ■

## PRODUCTS BUILT BY CANADIANS FOR CANADIANS



Behind every product we sell is a hardworking, dedicated Canadian committed to delivering the best portable sanitation equipment in the world. It is this dedication that has allowed us to become Canada's largest portable sanitation equipment manufacturer. With four distribution centers across the country, we are committed to working even harder to ensure Canadians get the service they deserve and the products they need. That's a promise.



POLYJOHN CANADA polyjohn.ca

POLYJOHN USA polyjohn.com

POLYJOHN CENTRAL EUROPE | POLYJOHN INTERNATIONAL | polyjohn.eu

polyjohn.co.uk

POLYJOHN SOUTH AMERICA polyjohn.com.br

**POLYJOHN MEXICO** polyjohndemexico.com



## DISTRIBUTOR

- **★** BATTIONI **★** CHALLENGER
- **★** JUROP \* MASPORT
- **★** FRUITLAND **★** MORO
- **Pump Rebuild Kits In Stock**

**Call Today For** Information Or Prices On Tanks, Pumps **And All Parts** 

## **BASE TANKS INCLUDE:**

1/4" Thick Steel • Pipe Reinforced Baffles • Primary Shutoff Flanged and Dished Heads • 21" Top and Rear Hatches Full Length Under Carriage on Bottom of Tank

## BASE TANK PRICING

2100 gallon	3360 gallon\$8140
2500 gallon \$6740	
3000 gallon \$ <b>7575</b>	





800.364.7307

2100 EAST BOOTH ST. • SEARCY, AR 72143 Fax: 501.279.0003 • E-mail: sbs3647307@gmail.com



More power to you in the form of on-line training. Helpful videos, graphics and tests that get you and your team up to speed on maintaining and operating a Vac-Con truck more efficiently and safely.

## www.vac-con.com

A subsidiary of Holden Industries, Inc., Vac-Con is a 100% employee-owned company. ©2014 Vac-Con, all rights reserved.



## **Regulations Reboot**

Constant turnover of environmental protection officials and a statewide preference for local control make it a challenge for Pennsylvania wastewater associations to promote updated onsite rules By Doug Day

ennsylvania has no shortage of groups working to promote onsite wastewater systems. Two of them represent installers, pumpers and other septic system experts, while two others are specialized groups for enforcement officers and soil scientists.

The Pennsylvania Septage Management Association (PSMA) was formed in 1984 to represent pumpers, haulers and installers, according to

President Kyle Rigby. It now has around 200 members. The Pennsylvania chapter of the National Onsite Wastewater Recycling Association (POWRA) was formed in 2002 to serve a broad range of constituents, including onsite system consultants, installers, regulators and soil scientists. President Greg Marshall says it has 35 members.

All four groups hold seats on the state's Sewage Advisory Committee, which advises Pennsylvania's Department of Environmental Protection (DEP) when it comes to regulating the industry. They also share a lot of members. Marshall was on the board of the Pennsylvania Association of Sewage Enforcement Officers (PASEO) before becoming president of POWRA. "We know a lot about each other's business, and our issues affect everyone in our groups," says Marshall.



Contact Greg Marshall, Pennsylvania Onsite Wastewater Recycling Association president, at www.powra.org or 610/582-0605.

PSMA and PASEO also have the same executive administrator, Mark Mitman. "We want to work with the sewage enforcement officers so we can correct any problems or issues with onsite systems or installations," says Rigby. "He can help both organizations address the issues."

## **INCREASING ENFORCEMENT**

Under state law, townships and municipalities enforce the regulations promulgated by the DEP. As one of the states in the Chesapeake Bay Program, Pennsylvania is stepping up efforts to reduce water pollution from all sources.

"The DEP is asking townships to be more active in regulating and inspecting onsite systems," says Rigby. "Pennsylvania is very local-oriented and delegates a lot of responsibility to local authorities. Unfortunately, that leads to a lot of different interpretations. We try to educate the townships. Most of them require pumpers to be registered with their townships, and some are starting to ask if they are members of PSMA because they know we do a good job of training."

One of the challenges in Pennsylvania has been turnover at DEP, which has had three different secretaries in three years. With a new governor in 2015 comes a new cabinet. But the DEP secretary position had changed hands in the two years prior, as well. "It slows up anything that is going to be

done as far as regulations and approval of new systems," says Rigby. Technologies not included in the regulations have to be approved as they become available.

Marshall says one of the bigger problems is that the Sewage Facilities Act hasn't been updated since 1994, despite an effort about five years ago. "Our Sewage Advisory Committee went through a lengthy process reviewing all the regulations line by line," he says. "We came out with some really good proposed changes. Unfortunately, with the political climate, or it might have been that the fracking issues kind of sidetracked things, there wasn't the will

to get things done. We're still stuck in that limbo. Ultimately it needs to be done."

Another change at the top creates uncertainty about the direction of the department and even impacts staffing of the agency because other leadership positions, such as deputy administrators and bureaus heads, may also change.

Pennsylvania is very localoriented and delegates a lot of responsibility to local authorities. Unfortunately, that leads to a lot of different interpretations. We try to educate the townships. Most of them require pumpers to be registered with their townships, and some are starting to ask if they are members of PSMA because they know we do a good job of training.

- Kyle Rigby

## **WORKING TOGETHER**

The groups were able to push an important bill through the Legislature in 2013 to clarify that properly designed and installed systems adequately protect the watershed. "There were challenges posed by some environmental groups that were holding up development in what are called special watershed protection areas," explains Marshall. "The Legislature acted rather quickly to pass that act."

The revision was necessary to make it clear that such systems meet the state's antidegradation requirements. Through lobbying efforts by the various groups, they

were able to get a bill introduced, and it got a lot of support. "It was probably the quickest environmental regulation I've seen passed," says Marshall. "The Sewage Advisory Committee and the influence our groups have with the Legislature are our biggest asset."

Both PSMA and POWRA focus on education of their members, though their offerings are different. POWRA has two events a year that focus mainly on alternatives to standard septic systems. Recently they explored a wetlands drip treatment system at Stroud Water Research Center and visited the waste recycling facility at Kline's Services.

Other events have included tours of a large-volume spray irrigation system at Penn State and a visit to Rodale Institute, an organic farming re-



Contact Kyle Rigby, Pennsylvania Septage Management Association president, at www.psma.net or 717/763-7762.

search center, to see its wetlands drip treatment system. The group has also visited different innovative alternative residential systems. "Our group is more focused on that type of training rather than the more formal classroom training for continuing education," says Marshall. "This year, we are visiting sites to see some problem areas, what worked and what didn't, and how to overcome difficult sites. Then we'll have a session detailing the alternative systems that are available in the state."

## **TIME-OF-SALE INSPECTIONS**

PSMA's continuing education includes certification for real estate inspections. While time-of-transfer inspections are not required in the state, most banks are requiring them. There is no state certification for such inspectors, so PSMA offers a

two-year certification that requires renewal training.

"There is no mandate to be a certified installer; anybody can do it as long as they follow the design and the work is approved by the local Sew-

age Enforcement Officer," adds Rigby. Classes for installers and pumpers are offered during its winter conference every January and periodically throughout the year.

"We are really pushing training on the proper installation of septic systems, and worked with DEP on that," he adds. "We also do a lot of work on training for confined space entry, safety protocols and vacuum truck operation. Our members spend a lot of time and money sending their employees to our training sessions to provide quality service to homeowners and protect the environment."

PSMA also provides training for installers and inspectors in New Jersey to meet that state's continuing education

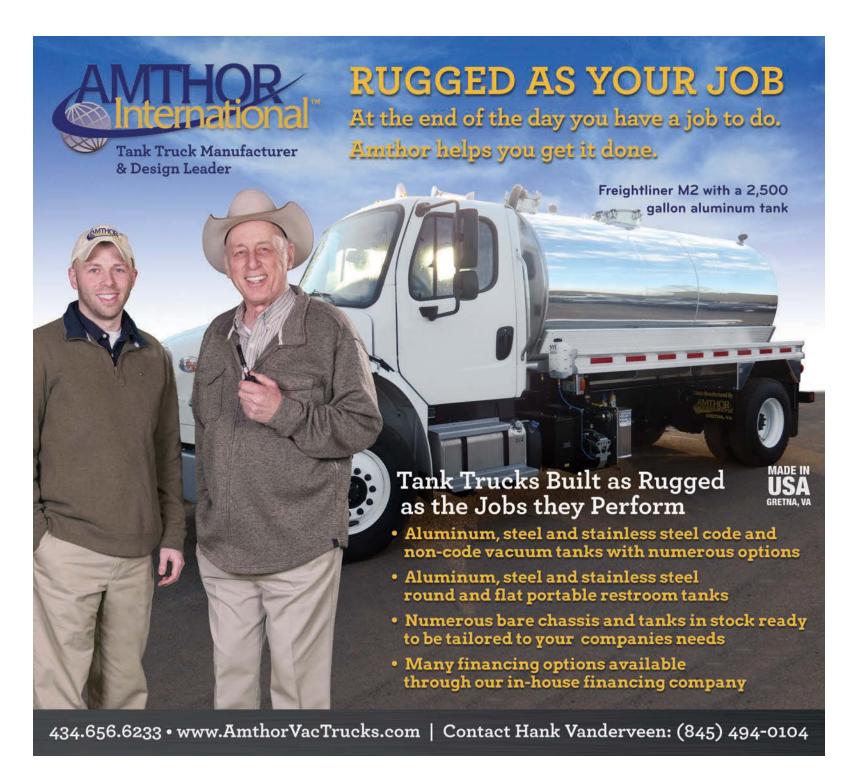
Other key groups representing those with an interest in Pennsylvania's onsite wastewater industry:

PASEO – the Pennsylvania Association of Sewage Enforcement Officers – has about 460 members, mainly local regulators, typically townships officials, who serve as the enforcement arm for the state Department of Environmental Protection. It was formed in 1986. PASEO and PSMA share the same administrative director, Mark Mitman, who manages the groups' operations.

**PAPSS** – the Pennsylvania Association of Professional Soil Scientists – founded in 1975, consists mainly of professionals in the field of soils.

requirements. PSMA would like Pennsylvania to begin certifying inspectors and installers and has been working to get such regulations. While there may be some interest in the idea, there hasn't been much progress to date. So the groups continue to do what they can so consumers get quality onsite wastewater services. ■









## BEST DECISION



Summit

When picking a quality restroom there is a lot you need to consider. Durability, price and dependability are all important factors. Five Peaks can guarantee you are making a great decision if you choose from their superior product line. Here's why.



**EXCEPTIONAL QUALITY** | Five Peaks has a history of producing high quality portable restrooms. We pioneered the inclusion of standard features others only offered as expensive add-ons such as mirrors, a hover handle and utility hooks. **BETTER PRICING** | From our elegant design to our service, know-how and responsible manufacturing, it's nice to know that Five Peaks products remain competitively priced. We offer quantity discounts as well as specials and sales events. **SUPERIOR DEPENDABILITY** | Five Peaks units are designed for years of maintenance free service. Durable enough to handle day-to-day service on construction sites yet elegant enough to turn heads at special events.



To place an order or for more information please contact us.

Made in U.S.A.



v 231.830.8099 **Q 866.293.1502** 

Aspen



## Simple Septage Receiving

Dewatering plant owner markets receiving station to the industry

## **By Craig Mandli**

cott Meyer was stuck. An increase in volume at his Idaho septage dewatering plant, along with tighter cleanliness regulations for landapplied biosolids, left him struggling to keep up. That's when he took matters into his own hands.

"Our screening system was constantly plugging with hair and rags, and having to stop periodically to clean it meant I couldn't filter septage at the volume I needed to," says Meyer. "I started tinkering with my own design, and that's how Screenco Systems was born."

Meyer's high-capacity Dual Screen System, which made its commercial debut at the 2015 Water & Wastewater Equipment, Treatment & Transport (WWETT) Show, is constructed of aluminum with stainless steel screens, with collection sump and a high-capacity 6-inch drain. The screen has two 3/8-inch gapped stainless steel bar screens at opposing angles, providing a non-mechanical method to remove large pieces of trash, rocks and other debris.

"It's really a simple design with no moving parts," says Meyer. "When the septage is pumped in, trash and debris hit the deflector and end up on the bottom of the screen. Once it starts draining slower, the operator manually rakes it clean."

This unit has a 4-inch telescoping inlet hose that moves laterally and can be easily connected to any vacuum truck or other flow stream. The system is portable, and the 19.5 square feet of screening area allows for continued use and is easy to rake clean to the garbage drain tray. It can treat over 500 gpm. Various-gapped screen sizes are available. It can be mounted above an open-pit settling pond or used in a stand-alone application. The station is easily cleaned with water; catwalk access enables easy cleaning and raking with an included stainless steel rake. Filtered garbage that collects atop screens can be raked into a wheelbarrow or container.

"We built and tested multiple designs, and have been beta testing this current version in commercial applications for the past 18 months,"



www.kentuckytank.com

1.888.459.8265



says Meyer. "We use it every day at our dewatering plant, and we've seen cleaner biosolids, faster off-load times and improved productivity. We've run 35,000 gpd through our screen, and the biosolids are virtually garbage-free."

While he's been to several past Pumper & Cleaner Expos and the newly named WWETT Show, 2015 was Meyer's first as an exhibitor. He says his goal Scott Meyer, right, the owner of Screenco Systems and inventor of the Dual Screen System, discusses the features of his receiving station with an attendee at the 2015 WWETT Show. The gravity system dewaters septage, filtering out garbage that collects atop screens and is manually raked into a collection device. (Photo by Craig Mandli)

coming into the week was simply to introduce the industry to his product.

"We aimed this system at people like me – septic pumpers and those that do their own dewatering, and small municipalities that dewater as part of their pretreatment," he says. "I'm hoping to show them that there is a product out there that is simple and affordable. Judging by the positive reaction, a lot of guys have been dealing with the same issues I was."

Meyer was excited by the response, and sold several units while on the exhibit floor. He says he's already thinking about WWETT 2016, and promises to be back with a "bigger and even better" dual-screen design.

"I have a couple of upgrade ideas, including adding forklift skids to make the station more portable," he says. "The guys I talked with at WWETT told me it was a great design at a good price. Hearing that kind of feedback is exciting." 208/790-8770; www.screencosystems.com. ■

Tank Technologies & Supply Co. LLC

In Stock of Custom Financing and Lease Options Aluminum or Stainless St 300-6000 Gallor Trailers Many Trucks In Sto

### T **SLIDE IN TANKS**

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

300 Gallon (200/100) 450 Gallon (300/150) 600 Gallon (400/200) 800 Gallon (540/260) 995 Gallon (670/325) Single section available

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



IN STOCK!

F550 JUNE SPECIALS! ricing good through June 30, 2015 or until sold

## 2000 gallon (1500/500)

## PORTABLE RESTROOM SERVICE

2015 Ford F550, 18,000# GVW, 84" CA 1200 gal (900 waste/300 fresh) HXL4, DC10, Hannay, large cabinets, toilet hauler \$77,600 lease from \$1,280

2015 Ford F550, 19,500# GVW, 84" CA 1200 gal (900 waste/300 fresh) HXL4, FloJet, dual cabinets, toilet hauler \$76,700 lease from \$1,260

2015 Ford F550, 19,500# GVW, 84" CA 1250 gal (950 waste/300 fresh) HXL4, DC10, Hannay, large cabinets, toilet hauler \$82,600 lease from \$1,360

2014 Ford F550, 19,500# GVW, 120" CA 1500 gal (1100 waste/400 fresh) HXL4, DC10, Hannay, large cabinets, external remote, toilet hauler \$81,600



**Restroom Trucks** 

2500 Gallon complete trucks in stock from \$102,000 3600 Gallon complete trucks in stock from \$132,000 4200 Gallon complete trucks in stock from \$134,000 Front Hoist and Rear Door tanks in stock!







**FACTORY BUILT TRUCKS** BUILT-TO-ORDER IN-STOCK IN-HOUSE FINANCING

## Your Blank Canvas Awaits!

## **Ultra-Vac**Truck, Trailer, Tank - Centerline Is Your Vacuum Answer

PUMPER ARTISTS! You know what you want & need; so get it at Centerline! We start every build with YOUR input: capacity, inlet/outlet size & location, lighting, pump type, valve requirements, graphics, freshwater wash down you name it, & you've got it! Call us & let's get your MASTERPIECE started!



800-752-5159 | www.centerlinetrailer.com

**NEW & USED SALES, SERVICE & PARTS** 



Electric Start 5.5 HP Honda, Condé Super 6 vacuum pump w/4-way valve 30'x2" Tiger Tail inlet hose w/stinger, washdown system w/50' hose, 3" discharge, 12V battery & work light

Not all models available at all locations



Available from 300 to 1500 Gallon Capacities, Single & Multi-Compartment Call for Availability! SIW0515

To get preapproved go to https://keevacindustriesinc.directcapital.com

(115 CFM), Honda 9 HP Electric start, 30"

tiger tail hose with valve and wand, 50"

wash down hose, COMPLETE AND

READY TO WORK

www.slideinwarehouse.com Call Us Today Toll-Free: 888-445-4892

<sup>\$</sup>16,495



## Vacuum Technology



Est. 1939

#6/12 SDS

**Direct Drive Gas Unit** 





Pumps 35 Thru 230 CFM

**Belt Drive Gas Unit** 



Professional Grade Equipment
DESIGNED, MACHINED & ASSEMBLED IN THE USA



## Provac

**Industrial Pumpout System** 

ON 7.3125 B.C.

Simply its the "BEST"

EACH OTHER WITHIN .0005"

ARALLEL WITHIN .0005

**IDEAL FOR SERVICING GREASE TRAPS** 

WESTMOOR LTD.

906 WEST HAMILTON AVE
SHERRILL, NY 13461

**Manufacturers of:** 



**Pumps & Accessories** 

PHONE: 800-367-0972
FAX: 315-363-0193

WWW.WESTIMOORLITD.COM



Jim Anderson, Ph.D., 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.

## My Dream Septic System

From the settling tank to the end of the distribution lines, an ideal system treats waste efficiently and can be easily maintained By Jim Anderson, Ph.D.

QUESTION: What is an ideal septic system?

**ANSWER:** Recently someone asked what components I thought would make up the ideal septic system. Of course my initial reaction was that there is no such thing; that the system needs to be matched to the type of residence or establishment and the particular site and soil characteristics.

Giving the question a little more thought, I decided that based on what has been learned about systems over the last 30 years, it is possible to come up with a general profile of an ideal septic system. But we must take into account that adjustments would have to be made based on site characteristics.

## **TANK TO DISPERSAL**

So here is my attempt to describe an ideal system along with some of my reasons for selecting those components:

It starts with a properly sized and maintained septic tank or tanks in series to deliver domestic sewage effluent with no more than  $160\,\mathrm{mg/L}$  BOD,  $60\,\mathrm{mg/L}$  TSS and  $20\,\mathrm{mg/L}$  FOG. This would be followed by some additional pretreatment by an aerobic treatment unit (ATU) or media filter. This pretreatment will lower the levels of BOD, TSS and FOG as well as reduce the fecal coliform levels in the effluent as an indicator for presence of pathogens. This will reduce the amount of treatment necessary in the soil treatment component of the system.

A pump tank would be next, with a pump to deliver effluent by pressure distribution to the soil dispersal system. Effluent delivery would be controlled by a timer rather than allowing on-demand dosing. This will allow for capture of large surge flows and equalize the flow over the entire day rather than having the flow concentrated at specific times, typically in the morning and late afternoon for a residence. Timed dosing also reduces the stress on the soil treatment area during high-use events, such as doing the laundry.

With pressure distribution in the soil treatment area and the pretreated effluent, there is little to no development of a biomat to restrict flow. Controlling the flow and using all of the system reduces the potential movement of pathogens through the soil along preferential flow paths and increases the amount of time the effluent is in contact with the soil, allowing better removal.

In terms of the distribution laterals, having more orifices (holes) is better. I often see designs for laterals that have a 5-foot spacing between them; there is better overall distribution if that number is reduced to 2- to 3-foot spacing, depending on the configuration. This may require a somewhat larger pump, but that's a good investment from a treatment efficiency standpoint.

### **BEST TRENCHES**

Narrow, shallow trenches installed on the contour would make up the final treatment and dispersal area. A narrow trench would be 1 to 2 feet wide and no more than 1 foot deep in the natural, undisturbed soil. Even better would be an at-grade system with no excavation into the natural soil.

Narrow trenches reduce the linear loading rate along the contour and provide increased soil contact with the effluent. One downside may be that the site does not allow long runs along a given contour, but dividing the area into multiple separate areas allows the opportunity to periodically rest parts of the system to help maintain soil permeability.

Shallow to at-grade placement takes advantage of the best parts of the natural soil for treatment. Natural soil bacteria and other microorganisms play an important role in the treatment processes. About 98 percent of these organisms are found within the upper 16 inches in a typical soil profile. If we are counting on these organisms to help in the treatment process, excavating more than a foot into the soil takes the system out of this biologically active zone. At 30 inches, there is only about 0.5 percent of the total organisms present.

Keeping the trenches shallow also makes use of the most permeable portion of the soil profile and the area where there is the most root growth by vegetation. To the extent plant uptake can help with treatment, the system should be located in this zone. About two-thirds of root growth occurs in the upper 2 feet of the soil profile, with 40 percent in the upper foot. This is also a reflection of where the soil is most permeable.

## **EASY EVALUATION**

The ideal system will also include instruments to evaluate flow and flow characteristics. This means adding time-elapsed meters or cycle counters combined with pump delivery information and pump cycle counters. Inspection ports should be added in the trenches to enable evaluation of potential ponding issues.

Finally, all components of the ideal system will be installed so they are accessible to allow for routine operation and maintenance, which includes tank and pump maintenance as well as the opportunity to periodically clean the pressure distribution laterals.

There you have my outline for an ideal system. Is this what systems look like in your area? If not, is it time to consider some changes? I think the answer should be "yes." Why not take full advantage of the lessons we've learned?







Thank you James from Schulteis Sanitation

Thank you Jeff from Jeff Waldvogel Trucking





**IMPERIAL INDUSTRIES INCORPORATED** 

NCORPORATED

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

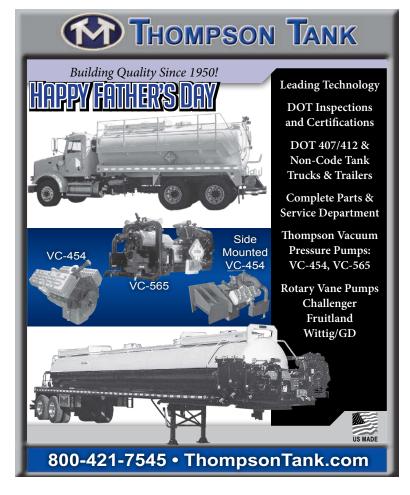
Randy Tischendorf - randy@imperialind.com Portable Restroom Service Units / Septic & Grease Units

Kristi Adams - Kristi@imperialind.com Portable Restrooms / Chemicals / Wash Sinks / Slide-In Units

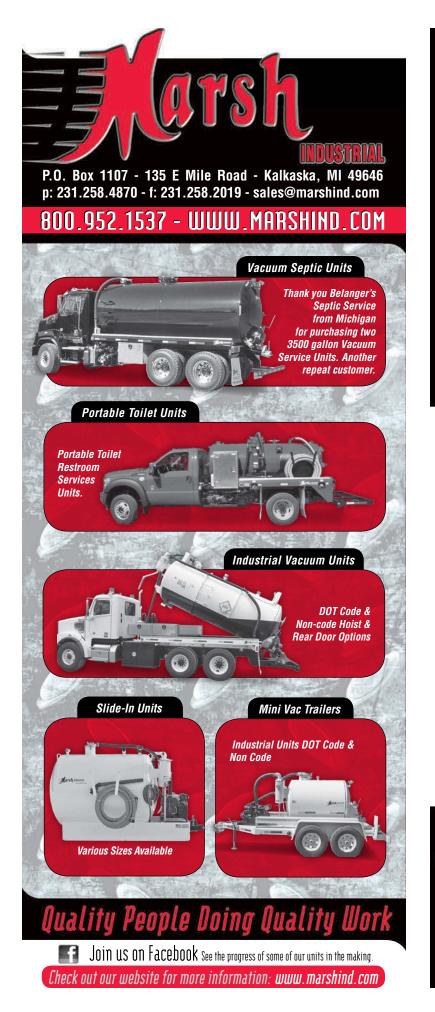
Kyle Haase - Kyle@imperialind.com Trailer Units / Grease Units/ Septic Units

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









## IT'S FINALLY HERE!



THE CCLS SQUIRT PUMP

You asked for it...You got it! At long last we are thrilled to introduce the **CCLS Squirt Pump** for residential applications.

That's right, when your customers want an automatic, no brainer, don't have to think about it solution to injecting **CCLS** into their septic systems, this close cousin to our **DrainMaster** timed, metering pump is the answer. The **CCLS Squirt Pump** is simple to install and plugs into a regular 110vac wall outlet. No hard wiring required.

The pump can be set to inject as much or as little **CCLS** as you want, and as often as you want. The built in timer is simple to operate, just set it and forget it. All installation hardware is included.

So if your customers just can't seem to remember to pour **CCLS** down the drain periodically, the Squirt timed metering pump will remember for them.

For more information on the **CCLS Squirt Pump** call us at 1-800-759-2257 or visit us online at <a href="https://www.SepticOnline.com">www.SepticOnline.com</a>. We'll send you our entire product catalog, including pricing, sales brochures, and educational pieces on all our products for residential and commercial septic systems, restaurant grease waste systems, and for restoring drainage.

Remember, CCLS only works if you use it. Now there's a way to be sure it gets used.

Please call today. Thank you.

- Rick Howe, President



CAPE COD BIOCHEMICAL CO. 800-759-CCLS

www.SepticOnline.com







Green Products for Septic Professionals Since 1976 If you would like your wastewater trade association added to this list, send contact information to editor@pumper.com.

## **Serving the Industry**

## Visit your state and provincial trade associations

## **Alabama**

Alabama Onsite Wastewater Association www.aowainfo.org; 334/396-3434

## Arizona

Arizona Onsite Wastewater Recycling Association www.azowra.org; 928/443-0333

## **Arkansas**

Arkansas Onsite Wastewater Association www.arkowa.com

## California

California Onsite Wastewater Association www.cowa.org; 530/513-6658

## Colorado

Colorado Professionals in Onsite Wastewater www.cpow.net; 720/626-8989

## Connecticut

Connecticut Onsite Wastewater Recycling Association www.cowra-online.org; 860/267-1057

## **Delaware**

Delaware On-Site Wastewater Recycling Association www.dowra.org

## **Florida**

Florida Onsite Wastewater Association www.fowaonsite.com; 321/363-1590

## Georgia

Georgia Onsite Wastewater Association www.onsitewastewater.org; 678/646-0379

Georgia F.O.G. Alliance www.georgiafog.com

## Idaho

Onsite Wastewater Association of Idaho www.owaidaho.org; 208/664-2133

## Illinois

Onsite Wastewater Professionals of Illinois www.owpi.net

## Indiana

Indiana Onsite Waste Water Professionals Association www.iowpa.org; 317/889-2382

### lowa

Iowa Onsite Waste Water Association www.iowwa.com; 515/225-1051

## Kansas

Kansas Small Flows Association www.ksfa.org; 913/594-1472

## Kentucky

Kentucky Onsite Wastewater Association www.kentuckyonsite.org; 855/818-5692

## Maine

Maine Association Of Site Evaluators www.mainese.com.

Maine Association of Professional Soil Scientists www.mapss.org.

## **Maryland**

Maryland Onsite Wastewater Professionals Association www.mowpa.org; 443/570-2029

## Massachusetts

Massachusetts Association of Onsite Wastewater Professionals www.maowp.org; 781/939-5710

## Michigan

Michigan Onsite Wastewater Recycling Association www.mowra.org

Michigan Septic Tank Association www.msta.biz; 989/808-8648

## Minnesota

Minnesota Onsite Wastewater Association www.mowa-mn.com; 888/810-4178

## Missouri

Missouri Smallflows Organization www.mosmallflows.org; 417/739-4100

## Nebraska

Nebraska On-site Waste Water Association www.nowwa.org; 402/476-0162

## **New Hampshire**

New Hampshire Association of Septage Haulers www.nhash.com: 603/831-8670

Granite State Designers and Installers Association www.gsdia.org; 603/228-1231

## **New Mexico**

Professional Onsite Wastewater Reuse Association of New Mexico www.powranm.org; 505/989-7676

## **New York**

Long Island Liquid Waste Association, Inc. www.lilwa.org; 631/585-0448

## **North Carolina**

North Carolina Septic Tank Association www.ncsta.net; 336/416-3564

North Carolina Portable Toilet Group www.ncportabletoiletgroup.org; 252/249-1097

North Carolina Pumper Group www.ncpumpergroup.org; 252/249-1097

## Ohio

Ohio Onsite Wastewater Association www.ohioonsite.org; 866/843-4429

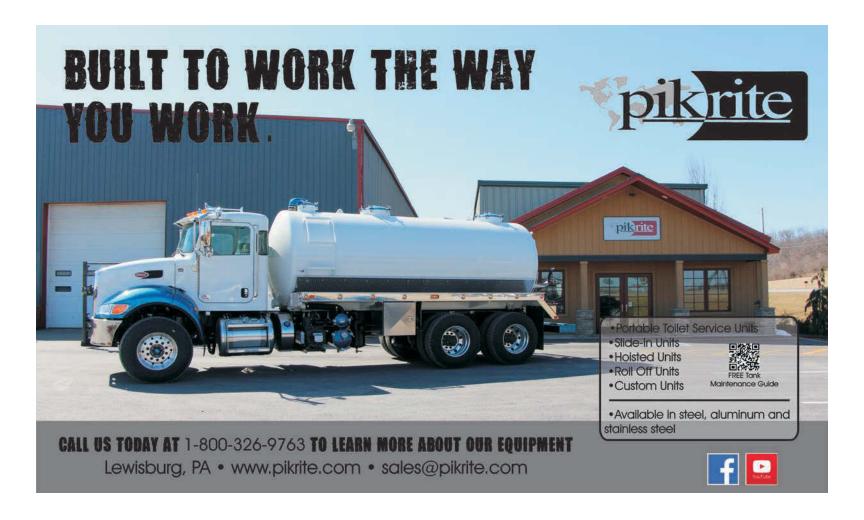
## Oregon

Oregon Onsite Wastewater Association www.o2wa.org; 541/389-6692

## Pennsylvania

Pennsylvania Association of Sewage Enforcement Officers www.pa-seo.org; 717/761-8648

Pennsylvania Onsite Wastewater Recycling Association www.powra.org



## Pennsylvania

Pennsylvania Septage Management Association www.psma.net; 717/763-7762

## Tennessee

Tennessee Onsite Wastewater Association www.tnonsite.org.

## **Texas**

Texas On-Site Wastewater Association www.txowa.org; 888/398-7188

## Virginia

Virginia Onsite Wastewater Recycling Association www.vowra.org; 540/377-9830

## Washington

Washington On-Site Sewage Association www.wossa.org; 253/770-6594

## Wisconsin

Wisconsin Onsite Water Recycling Association www.wowra.com; 608/441-1436

Wisconsin Liquid Waste Carriers Association www.wlwca.com; 608/441-1436

## **NATIONAL**

Water Environment Federation www.wef.org; 800/666-0206

National Onsite Wastewater Recycling Association www.nowra.org; 800/966-2942

National Association of Wastewater Technicians www.nawt.org; 800/236-6298

## **CANADA**

## Alberta

Alberta Onsite Wastewater Management Association www.aowma.com; 877/489-7471

## **British Columbia**

WCOWMA Onsite Wastewater Management of B.C. www.wcowma-bc.com; 877/489-7471

British Columbia Onsite Sewage Association www.bcossa.org; 778/432-2120

## Manitoba

Manitoba Onsite Wastewater Management Association www.mowma.org; 877/489-7471

Onsite Wastewater Systems Installers of Manitoba, Inc. www.owsim.com; 204/771-0455

## **New Brunswick**

New Brunswick Association of Onsite Wastewater Professionals www.nbaowp.ca; 506/455-5477

## **Nova Scotia**

Waste Water Nova Scotia www.wwns.ca; 902/246-2131

## Ontari

Ontario Onsite Wastewater Association www.oowa.org; 855/905-6692

Ontario Association of Sewage Industry Services www.oasisontario.on.ca; 877/202-0082

## Saskatchewan

Saskatchewan Onsite Wastewater Management Association www.sowma.ca; 877/489-7471

## **Canadian Regional**

Western Canada Onsite Wastewater Management Association www.wcowma.com; 877/489-7471





# 

- OPERATOR-FRIENDLY
- SIMPLE MAINTENANCE
- **VERSATILE**
- **EASY OPERATION**
- MAXIMUM EFFICIENCY
- **GLOBAL SALES & SUPPORT**



800.752.2400 - 740.374.2306 - www.X-Vac.com



Erik Gunn is a business writer in Racine, Wisconsin.

## **Stop the Revolving Door**

Trying to keep workers doesn't have to cost a lot; not caring why they leave will cost you plenty

## By Erik Gunn

abor markets are getting tighter, the headlines tell us, and you probably didn't have to pick up the paper to know that. As the economy inches back to life and jobs start to open up again, you may have already seen some employees head elsewhere.

So, what can you do?

Don't be among those bosses who shrug their shoulders and figure they just have to hire continuously. If you are, you need to know that employee turnover can cost you much more than you think.

There's a bright side, however: You can reduce turnover, even if you operate in a business or a geographic area where good workers are in high demand.

## THE COST OF LOSS

Dõv Baron is a leadership business consultant through his firm, Authentic Paragon Alliance. He hosts a radio show and podcast on leadership, and his most recent book, *Fiercely Loyal: How High Performing Companies Develop and Retain Top Talent,* focuses on the topic.

"The average cost of training and development of a new staff member is one and a half to two times the annual salary of that individual," Baron says, citing U.S. Department of Labor statistics. When your business loses a person, there is a diminishing return on the investment in hiring and training that individual.

The cost doesn't just come in training and development expenses. Jan Watson, whose consulting firm, Inflection Point, in McKinney, Texas, helps businesses with hiring and retention, points out that when you lose workers, you'll spend more on everything from processing the paperwork to recruiting and hiring a replacement.

Add to that the cost of lost productivity while the newcomer gets up to speed. And if the departed employee had performance problems, she observes, you've probably made an additional investment in coaching that person and documenting problems along the way — only to see it all evaporate when the person leaves anyway.

Don't forget another, lesser-known cost, adds Dan Kalish, managing partner of HKM Employment Attorneys in Seattle: "Anytime an employee leaves, there is always the possibility of litigation, even if frivolous, which can cost tens of thousands of dollars to resolve."

## **WHY THEY WALK**

We usually think better pay or benefits are the bait that employees follow when they go across town to your competitor. The truth is a lot more complicated. OK, you're saying, but you're already paying competitive wages and offering good benefits. Does that mean you've got to pay still more for either, or both?

Not necessarily, says Watson: "Some of the most simple, cost-effective incentives range from providing an 'Employee of the Month' parking space, or gift certificates to a restaurant, spa or sporting event, to success-performance bonuses with incentivized goals, team rewards or trips."

Sometimes money is just a red herring. Watson and Baron agree that money doesn't talk as loudly as it once did.

We're told that the under-35 set, the so-called millennial generation, is especially deaf to the sound of dollars, but it's not just them.

"Baby boomers and millennials alike want more from working," Watson says. "They want to belong to a work culture that provides core values, accountability and shared responsibility, effective communication and praise."

So, she says, if you're seeing employees flock elsewhere, consider that your work culture might be driving them away — and

what it would take to fix that.

Another problem could be a bad match between the worker and the job. Watson notes that an applicant's resume won't actually do much to help you make a good match. Instead, she recommends a professionally designed exam closely aligned to the job you're trying to fill that assesses not just the applicant's technical knowledge but other necessary qualities, such as attitudes and personality traits.

Baron considers poor leadership the No. 1 reason that people quit. "Generally speaking, people don't leave jobs, they usually leave bosses," he says. Another problem? "There's nothing to bond to. This means your people have no reason to be there outside of the fact that you pay

them. Once someone is disengaged, it's easy to lose them."

Jan Watson

Baby boomers and millennials alike

want more from working.

They want to belong to a

work culture that provides

core values, accountability

and shared responsibility,

effective communication

and praise. 77

## **MAKING THEM STAY**

One way to engage people is to give them a sense of their future with you. Watson suggests developing stronger professional development programs. Once an employee passes the nine-month mark, "an employer should start to discuss advancement opportunities and create a professional development plan," she says. "This can be as basic as providing continuing education or as extensive as succession management planning and grooming the employee for leadership."

Beyond that, Baron says it's time to get serious about demographics. Millennials are the new workforce, and they really are different, he contends.



## Clear Computing Software

- ✓ Paperless Operations for Office, Drivers, Sales, Customers
- ✓ Designed for the Waste Industry
- √ Mac/Apple/Chrome/Windows
- ✓ Mobile Real-Time Routes
- ✓ Instant Back-Office Reporting
- √ Voice, Text, GPS
- ✓ QR Code and Barcode Scans

Call Today! 888-332-5327 www.clearcomputing.com



"Trying to make them fit the mold will push them out even faster."

He urges bosses to develop a stronger ability to relate to their employees and to foster cooperation and collaboration all across the business. "Everyone on your team needs to embrace becoming a chief relationship officer," he says.

Strengthening the emotional bonds among employees can help foster loyalty that will lead workers to stick around. Again, that's especially true for this new generation, in Baron's view, and it's why money isn't everything.

## THE MILLENNIAL MACHINE

"Throwing money at millennials doesn't really work," he declares. "They do care about money; they have to pay bills like the rest of us. However, there is a point where money is no longer the motivator."

What is?

"Millennials want to work for organizations that are purpose-driven, meaning it's about more than the bottom line," Baron says. He likes thinking big — the way Apple did when it claimed the slogan, "We're here to put a dent in the universe."

So the bosses need to adapt.

"With a purpose that is strong and a leader who lives, eats, sleeps and breaths it, your people will go above and beyond what is required," Baron says. Yet very few companies, large or small, have taken the time to do that. They can start, he suggests, with a history lesson: "Sit down with the founder of the company and discover the originating purpose. What was the true driving force that made them keep going when they hit the wall?"

And if you're that founder, maybe you can find the spark that lit your fire all those years ago in the first place — and see it catch once again in a new generation. Wouldn't that be something to stick around for?



TRUCK TOW BEHIND PORTASCREEN SPREADER

Doubles as Screener Spreader and Mobile Septic Receiving Station

## People's United Equipment Finance Corp.



- Industry Finance Specialists
- Industrial and Commercial Equipment Financing
- Manufacturer Programs Available
- Acquisitions Financing

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

Gerald Hargrave
Cell: 713-898-0531
Area: TX, OK, LA, NM

JD Magness Cell: 804-694-6183 Area: Eastern VA, MD. DC. NJ. DE **Bob Marino** Cell: 215-360-1776 Area: PA, NY, CT, RI, MA, NH, VT, ME **Ozzie Merino** Cell: 714-351-4798 Area: CA, OR, WA, ID **John Moore**Cell: 720-315-0959
Area: NV, CO, MT, WY,
UT, NM, NE, KS

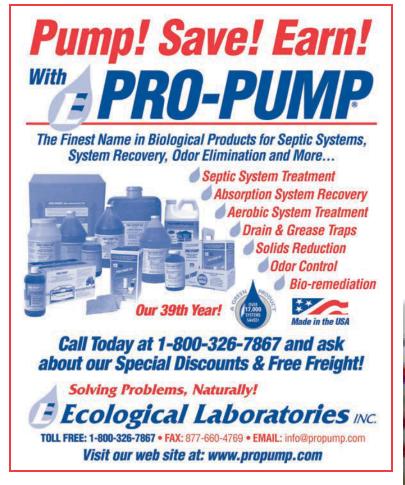
Kevin Parry
Cell: 704-650-2635
Area: NC, WV, SC,
Western VA. Inside Sales

**Bob Pritchett**Cell: 205-999-4214
Area: GA, FL,
AL, MS, AR

**Perry Siler**Cell: 231-745-3495
Area: MN, WI, IL, IN,
MI, OH, IA, ND, SD

Kevin Steier Cell: 502-741-7524 Area: TN, KY, OH, WV. MO







## BEST ENTERPRISES, INC.

Building quality Stainless Steel Tanks since 1972







Due to the great response, we have extended our IN STOCK tank sale through June.















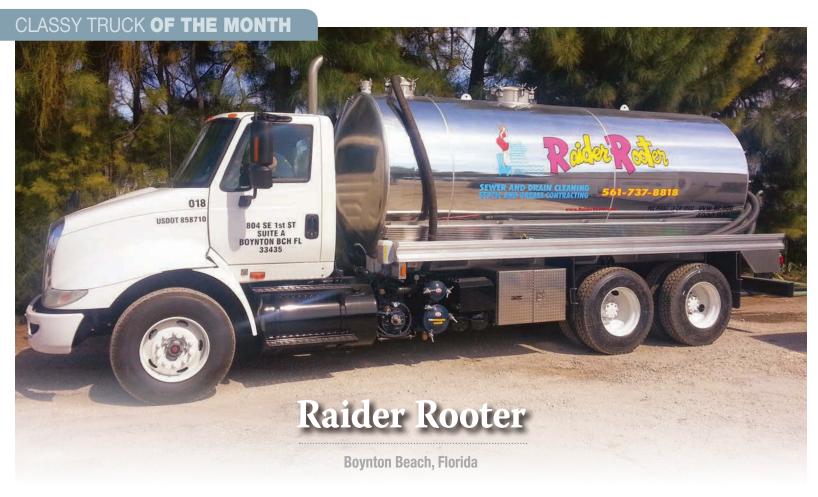


Located in Cabot, Arkansas 501-988-1905 800-288-2378 www.bestenterprises.net

Best Enterprises, Inc.

www.youtube.com/bestentinc







n 2014, owner James Pardew purchased this 2006 International 8600 with a 410 hp Cummins engine and 10-speed Eaton Fuller transmission as an over-the-road semi-tractor and had it converted for vacuum service. Engine & Accessory added an Amthor International 4,000-gallon waste/200-gallon freshwater aluminum tank and Masport HXI.400 WV pump. The truck features top and rear 20-inch manways, sight glasses in the rear and a sight tube for the water tank in the front, a General Pump TSF Series toolbox jetter, a 24-inch aluminum toolbox, aluminum hose trays and steel painted wheels. The interior features AC, stereo with CD and air-ride driver's seat. Logo and lettering were done by Screen Graphics of Florida. The truck is used for residential septic and commercial grease trap 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. Email 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!

## SEASONS CHANGE - DEDICATION DOESN'T

Stainless Steel • Aluminum • Code & Non-Code

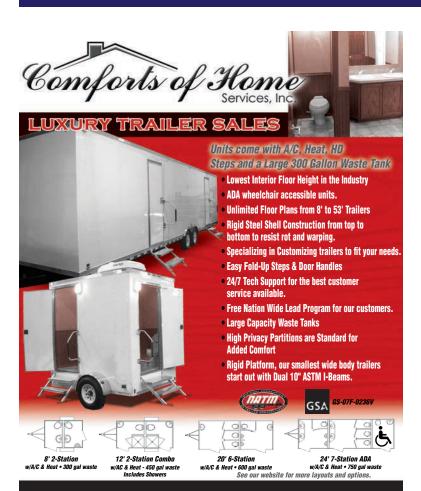


Manufacturing Vacuum Trailers for the Liquid Transportation Industry

Parts • Repair • Complete Pumping Systems



www.acrotrailer.com • 417.862.1758 • Fax - 417.862.8084 • 2320 North Packer Road • Springfield, Missouri 65803















## TRANSPORT TRUCK SALES, INC.

Ask for Scott or Frank – 888-395-7551 After hours call Scott at 816-590-4076



2009 Sterling LT-9513, Cat 350 HP, jake, 10 pd, 20# lb fronts, double framed, Full lockers, **NEW** 4200 gallon Alum. vac tank, **NEW** Masport 400 Vac pump.

Call For Pricing! 2-YEAR 200,000 MILE DRIVE TRAIN WARRANTY



NEW 2015 Kenworth 270, PX-7 240 HP,Auto, Exhaust brake, Alum. wheels, NEW 2000 Gallon Portable toilet tank, NEW Masport HXL-4Vac pump, toilet carrier. \$106,500



NEW 2015 Dodge 5500, Cummins 325 HP, Auto, NEW 1250 Gallon portable toilet tank, NEW Jurop PN-33 Vac pump. \$79,950



2006 International 4300, DT-466E 210 HP, AUTO, NON CDL, AC, low miles, **NEW** 1850 gallon steel vac tank, **NEW** Jurop PN-84 vac pump

> Call For Pricing! 2-YEAR 100,000 MILE DRIVE TRAIN WARRANTY



2007 Mack CX613, Mack 380 HP, 10 spd, jake, AC, NEW 3400 gallon steel vac tank, NEW Masport 400 liquid cooled vac pump. Call For Pricing!

2-YEAR 200,000 MILE DRIVE TRAIN WARRANTY



2009 Peterbilt 388, Cat 470 HP, I3 spd, jake, AC, low miles, NEW 3360 gallon steel vac tank, NEW Masport 400 liquid cooled vac pump.

Call For Pricing!

2-YEAR 200,000 MILE

**DRIVE TRAIN WARRANTY** 



2005 Freightliner M-2, Cat 210 HP,AUTO, NON CDL,AC, low miles, **NEW** 1850 gallon steel vac tank, **NEW** Jurop PN-84 vac pump.

> Call For Pricing! 2-YEAR 100,000 MILE DRIVE TRAIN WARRANTY



2007 International 4300, DT 210 HP, 6 spd, NON CDL, NEW 2000 gallon Alum. vac tank, NEW Jurop PN-84 Vac pump.

Call For Pricing!

2-YEAR 100,000 MILE DRIVE TRAIN WARRANTY



2007 Freightliner M-2, Cat 230 HP, 6 spd, low miles, AC, NEW 2300 gallon steel vac tank, NEW Jurop PN-84 pump.
Call For Pricing!

2-YEAR 100,000 MILE DRIVE TRAIN WARRANTY





#### **NAWT BOARD OF DIRECTORS:**

Jeff Rachlin, President, PA Gene Bassett, Vice-President, NM Ralph Macchio, Treasurer, NY Tom Ferrero, Secretary, PA Tom Frank, Past President, OH Jim Anderson, Ed. Comm., MN John Creed, IN Jace Ensor, NM Bill Hall, CT Mitch Okerstrom, MN Kit Rosefield, CA

Susan Ruehl, OH Mark Scott, MI Hollis Warren, DE Roger S. Winter, ON, Canada

3150 W Higgins Rd., Ste. 105, Hoffman Estates, IL 60169 • 1-800-236-NAWT (6298) • Fax 847-885-8393 • www.nawt.org

## Updating the EPA Decentralized MOU Partnership

#### By Dhru Bhatt

he National Association of Wastewater Technicians, in collaboration with 20 other public and private sector organizations and governmental agencies, represent the U.S. Environmental Protection Agency Decentralized MOU (Memorandum of Understanding) Partnership. This partnership was established to improve decentralized wastewater management in the U.S.

Since its inception in 2005, the partnership has generated many successes, marked by better cooperation, collaboration, consultation and communication among the various organizations. The partnership has been working diligently to increase the awareness and safety of the wastewater industry. NAWT has done a tremendous amount of work to educate both industry professionals and the public on matters related to wastewater, septic systems and their safety.

The MOU renewal meeting held on Nov. 19-20, 2014, in Washington, D.C., was an eventful and productive meeting. The renewal ceremony honored three new partnership members: The International Association of Plumbing and Mechanical Officers (IAPMO), the National Association of Home Builders (NAHB) and the National Rural Water Association (NRWA).

The partner meeting that followed the ceremony featured diverse panel sessions and presentations, including a presentation from three MOU partners on industry successes and challenges, presentations on the CWA SRF (Clean Water Act State Revolving Fund) amendments, the Chesapeake Bay data sharing effort for advanced treatment systems and work group planning sessions of newly formed MOU Partnership work groups.

An overarching goal for the renewal period of the partnership is to increase the understanding of the benefits of decentralized systems through stakeholder engagement, marketing and product development. New MOU Partnership work groups were formed on stakeholder engagement, marketing, product development and the fifth position paper.

#### New EPA Water Infrastructure and Resiliency Finance Center

Raffael Stein was named director of the EPA Office of Wastewater Management (OWM) Municipal Support Division. In January, EPA Administrator Gina McCarthy and Vice President Joe Biden announced the new EPA Water Infrastructure and Resiliency Finance Center, which will allow the agency to finance projects within the water infrastructure sector. The new center supports the federal interagency work group, Build America Investment Initiative. The EPA is in the process of developing plans for the center and its staffing.

#### New resources - CWA-SDWA toolkit

"Opportunities to Protect Drinking Water and Advance Watershed

Goals Through the Clean Water Act: A Toolkit for State, Interstate, Tribal and Federal Water Program Managers" is designed to enable state and EPA water quality practitioners to better protect drinking water supplies. Using regulatory and nonregulatory provisions of the Clean Water Act, it better protects sources of drinking water and improves water quality.

The MOU partners involved in this effort include the Association of Clean Water Administrators (ACWA), the Groundwater Protection Council (GWPC) and the Association of State Drinking Water Administrators (ASDWA). The toolkit is the result of a multiyear collaborative effort by state and EPA water quality managers across clean water and safe drinking water programs. The group drew on expertise and examples of success from many states to highlight opportunities that address complex water quality challenges through a coordinated and collaborative approach.

Four webinars will be conducted over the next six months. Future webinars will focus on water quality monitoring and assessment, total maximum daily loads (TMDL) and National Pollutant Discharge Elimination Systems (NPDES), and nonpoint source and 319 programs. The toolkit contains no specific information on decentralized systems; however, there is information on funding options and infrastructure solutions.

#### 2015 calendar of events

- July 13-15 NEHA Annual Conference, Orlando, Florida
- July 26-28 WEF (Water Environment Federation) and WERF (Water Environment Research Foundation) Nutrient Symposium, San Jose, California
- Aug. 26-29 U.S. Water Alliance One Water Leadership Summit, San Francisco
- Sept. 21-25 EPA SepticSmart Week
- Sept. 26-30 WEFTEC 2015, Chicago
- Sept. 28-Oct. 1 GWPC Annual Forum, Oklahoma City
- Sept. 28-30 WaterPro Conference, Oklahoma City
- Nov. 3-6 NOWRA (National Onsite Wastewater Recycling Association), NAWT, SORA (State Onsite Regulators Association)
   Mega Onsite Conference, Virginia Beach
- Dec. 1-4 ACWA Fall Conference and Exhibition, Indian Wells, California

For more information on the EPA Decentralized MOU Partnership, visit  $http://water.epa.gov/infrastructure/septic/Decentralized-MOU-Partnership-Products.cfm. \blacksquare$ 

# Shhhhhhhh... ...it's a Challenger



### High Performance Rotary Lobe Blowers 560, 940 & 1,600 CFM

- · Continuous duty performance at maximum vacuum
- · Oil-less operation
- Stainless steel sound proof cabinet

- 4-Way pressure/vacuum change over valve
- · Integral final filter
- · Designed, built, and supported in the USA

The Power You Expect...At The Decibel Level You Desire.

Challenger Series
VACUUM PUMPS & BLOWERS



Reliable - Efficient - Cost Effective



800-253-5500 | natvac.com











## **Quality Used Trucks**

**Available for Immediate Delivery** 



#### 2007 Mack with 2012 Guzzler CL Truck ID #56434

- · 246,335 miles with 10,698 engine hours
- 425 horsepower
- · 60 bag filtration with air cannon
- · Single mode filtration
- · 14" SS liquid level float ball shutoff
- 5300 CFM 28" vacuum blower
- · Blower discharge temperature gauge
- · Omsi transfer case



#### 2006 Jetstream Water Blaster | Water Blaster ID #06105

- Model 3600
- · Cummins 5.9L engine
- 173 horsepower
- 3600 pump
- #6 plungers
- · Tank inlet filtration system
- · Hydraulic trailer brakes
- · Hydro-throttle
- · 40,000 PSI @ 6.8 GPM
- · Note: hours unverifiable



#### 2009 Int. 7600 with 2010 Vactor HXX | Truck ID #72091

- · Cat C-13 engine
- Fuller FRO-15210C transmission
- Mileage: 109,287 Hours: 4,612
- 430 horsepower
- GVWR: 66,000; front 20,000; rear 46,000
- 20 GPM Cat pump
- 8702 Hibon blower
- 12 yard debris box

Interested? Call John Stafford, FS Solutions Used Equipment Sales Manager (815) 341-3512 for pricing or visit fssolutionsgroup.com for a complete listing of used equipment



## Septage Disposal Management

By Craig Mandli

#### DEWATERING EQUIPMENT

### ALAR ENGINEERING CORP. AUTO-VAC

The **Auto-Vac** from **Alar Engineering Corp.** separates suspended solids from



septic sludge using rotary vacuum drum pre-coat filter technology. The water is drawn through a 1-micron media and typically discharges into the city sewer. The dewatered solids are captured on the drum surface and commonly disposed of at a local landfill or, in some cases, processed as compost. It is self-cleaning with every revolution of the drum, which prevents filter media from blinding or clogging. Its absolute microfiltration translates into a consistent flow of water that meets most discharge limits. The 27 inches of vacuum sucks the moisture out of the solids and reduces wet-tonnage hauling costs. 708/479-6100; www.alarcorp.com.

#### **BOERGER ROTORRAKE**

The **Rotorrake** compact, non-clogging, single-shaft macerator from **Boerger** grinds coarse solids and stringy material to protect downstream equipment. It incorporates reversible flow direction and extraction of hard substances with throughput

of up to 4,000 gpm. Solids-laden liquids are fed through

rotating angled counter blades, where they are captured and chopped. Macerated solids flow with the liquid, and foreign materials accumulate in the debris collector. The unit can be used as a stand-alone machine, as a pump or with other peripheral machines. 844/263-7437; www.boerger.com.

## BRIGHT TECHNOLOGIES BELT FILTER PRESS

The 1.7-meter, trailer-mounted belt filter press unit from **Bright Technologies** has an insulated control room with FRP walls, air conditioning, elec-



tric heat, a refrigerator, stainless steel desk, tool storage, locker, closed-circuit TV and remote operator controls. The modular design allows the room to be custom manufactured to fit most single-drop trailers. Units are made for rapid setup, with folding conveyor and operator walkways. No special lifting equipment is required. **800/253-0532**; www.brightbeltpress.com.

## FKC SKID-MOUNTED DEWATERING SYSTEM

**FKC** skid-mounted dewatering systems can be set up strictly for dewatering or used to heat-pasteurize biosolids while dewatering to achieve a Class A product. Lime is added before dewatering to



raise the pH to 12 in a separate agitated tank. The liquid biosolids are then pumped with polymer to the flocculation tank on the skid. Flocculated biosolids overflow from the tank into the rotary screen thickener and are gravity fed into the screw press, where steam from a small boiler is injected, heating the biosolids to meet the time and temperature requirements. 360/452-9472; www.fkcscrewpress.com.



## FOURNIER INDUSTRIES ROTARY PRESS

The **Rotary Press** from **Fournier Industries** uses two slowly rotating screens to create a 2-inch channel that sludge passes through as it dewaters. A pressure restrictor on the outlet allows the operator to vary the degree of cake dryness in

the final product. It has few components and is designed for ease of maintenance. The totally enclosed design mitigates odors and allows the operator to avoid direct contact with sludge. The control system allows for unattended operation, and can be equipped with a single dewatering channel, expandable up to six channels on a single machine. The unit has low power usage and noise levels, little water use and a compact footprint. 952/288-5771; www.rotary-press.com.

#### GEA WESTFALIA SEPARATOR ECOFORCE

The **ecoforce** dewatering decanter centrifuge from **GEA Westfalia Separator** is designed for maximum separation, durability and dramatically reduced energy consumption. It incorporates a four-stage high-torque drive that results



in up to a 50 percent reduction in power consumption. The machine's modular design allows easy conversion from three- to two-phase separation. It has high bowl speeds and is easy to maintain. **800/722-6622; www.wsus.com.** 

(continued)



## Armal introduces G-Wave

Made from recycled material, nearly

90% of the total weight of the toilet.

New warehouse locations in Bakersfield, CA and El Paso, TX



Armal Inc. 122 Hudson Industrial Drive Griffin, GA 30224 USA Phone: +1 770 491 6410 Toll free: 866 873 7796 www.armal.biz

#### **DEWATERING EQUIPMENT**

#### HYDRA-TECH PUMP S310SS

The **S310SS** 3-inch hydraulic submersible slim-line pump from **Hydra-Tech Pump** is designed for jobs such as blast hole dewatering, groundwater evacuation and sampling, utility manholes and construction job sites. It is used where space is limited, such as 4-inch well casings, transformer vaults and bilges. Combined with HT6 to HT13 power units, the stainless steel pump is capa-

ble of flow up to 60 gpm. The safe and variable-speed hydraulic drive can be used where electric power is hazardous or impractical. **570/645-3779**; www.hydra-tech.com.



#### IN THE ROUND DEWATERING HORIZONTAL DEWATERING DEVICE

The horizontal biosolids dewatering system from **In The Round Dewatering** has a stainless steel drum with perforated plastic tile lining. The drum is mounted on a roll-off frame for easy transport and

unloading. Water trays allow containment of discharge water. An 18,000- to 25,000-gallon batch is mixed with polymer before being filtered in the rotating drum, driven by a 1/2 hp variable-speed electric motor with a heavy-duty chain and sprocket. The turning eliminates crusting and wet pockets to produce uniform, consistent results. The dewatered material dumps easily and the drum is self-cleaning. 317/539-7304; www.itrdewatering.com.

#### JWC ENVIRONMENTAL 10K MUFFIN MONSTER

The 10K Series Muffin Monster from JWC Environmental grinds waste in a compact, easy-to-install unit. It is available in pipeline, open channel and pump station configurations. The dual-shaft design pulls material into and through the hard-ened steel cutters so the grinder can handle a wide variety of debris. To shred solids commonly found in waste streams, it comes with top and bottom bearings that prevent shaft deflection. Small par-



ticles produced by the unit can pass easily through pumps and pipelines. Custom stainless steel support frames allow for installation directly at the inlet sewage line on the wall of a pump station or into an existing channel. **800/331-2277**; www.jwce.com.



#### PRIME SOLUTION ROTARY FAN PRESS 2.0

The high-capacity, compact **Rotary Fan Press 2.0** from **Prime Solution** produces dry cake and is designed to be maintenance-friendly. It adds internal mixing to the company's rotary fan press technology to enable dewatering of difficult biosolids. **269/694-6666**; www.psirotary.com.

#### SCREENCO SYSTEMS DUAL SCREEN SYSTEM

The high-capacity **Dual Screen System** from **Screenco Systems** is constructed of aluminum with stainless steel screens, with collection sump and a high-capacity 6-inch drain. The screen has two 3/8-inch



gapped stainless steel bar screens at opposing angles, with the front screen virtually self-cleaning. It is a nonmechanical, simple way to remove large pieces of trash, rocks and other debris from the flow stream. This unit has a 4-inch telescoping inlet hose that moves laterally and can be easily connected to any vacuum truck or other flow stream. The system is portable, and the 19.5 square feet of screening area allows for continued use and is easy to rake clean to the garbage drain tray. It can treat over 500 gpm. Various-gapped screen sizes are available. **208/790-8770**; www.screencosystems.com.

#### LAND APPLICATION

#### LINCO-PRECISION BIO-PLIER 5500

The **Bio-Plier 5500** fertilizer application system from



**Linco-Precision** is a Cat Model CT660L 6 x 6 with a 475 hp engine generating 1,700 ft-lbs of torque. It has a CAT Model CX31 programmable automatic transmission with factory PTO and hydraulic pump, 58,000-pound rear axles with a 60-inch spread, Fabco transfer case and front axle. The application system has a 5,500-gallon pressure/vacuum tank with 5/16-inch walls and two baffles. It includes 25-inch top and rear manways, 20-inch hydraulic top-load hatch, dual 6-inch side-mounted load ports and a 6-inch rear discharge port. All plumbing is TIG-welded stainless steel. It is available with Kongskilde toolbars with up to 25 knives on 10-inch centers. **309/527-6455**; **www.lincoprecision.com.** 

#### **ROLL-OFF CONTAINERS**

#### AQUA-ZYME ADS 30 YD

The 30-yard dewatering unit from **AQUA-Zyme Disposal Systems** can be filled with 22,000 to 25,000 gallons of grease trap or septic



waste at 1 to 2 percent solids in about two hours. After draining 24 hours, the unit can be hauled to a landfill or other permitted facility for disposal. Sludge volume can be reduced by 80 percent with reductions to 98 percent in BOD, COD, FOG and TSS. Effluent is clear and sewerable. The unit has few moving parts and includes a roll-over tarp system; side, floor and center screens; 1/4-inch floor plate; seven-gauge side plates; four door binder ratchets; eight drain ports; two inlet ports; and a long-handle scraper. It can be hauled with a standard-capacity roll-off truck. Units are also available in a 15-yard size. **979/245-5656**; www.aqua-zyme.com.

(continued)



## Custom Manufacturer of Vacuum Trucks & Trailers





#### **ROLL-OFF CONTAINERS**

## BAKERS WASTE EQUIPMENT ROLL-OFF DEWATERING CONTAINER

Roll-off dewatering containers from **Bakers Waste Equipment** provide a one-step process for dewatering all types of liquid waste, including



septage, grease sludge, grit, hazardous waste, lagoon sludge and fly ash. Liquid waste is pumped into the containers, allowing the liquids to drain through filtered walls and floors. The liquid is collected in an area behind the walls and floors, staging it for discharge out one of the side drain ports. **800/221-4153**; www.bwe-nc.com.

#### BENLEE SUPER MINI

At 25 feet 11 inches, the **Super Mini** roll-off trailer from **Benlee** is as short as a straight truck when at-

tached to a tractor, but has a tighter turning radius and can be maneuvered into tighter spots. It weighs 12,400 pounds and can carry up to 50 percent more payload weight by

law than a roll-off truck. It can carry 20-, 30-, 40- and 50-yard-tall boxes, and frees up the tractor to be attached to another trailer when not in use. 734/890-6822; www.benlee.com.

#### BUCKS FABRICATING SLUDGE ROLL-OFF CONTAINER

Sludge roll-off containers from **Bucks Fabricating** are available in varying styles to suit specific needs. They can be



built in a tub or rectangular style, and have splash plates and various fittings. These sludge boxes are built to haul wet loads without the danger of spilling or leaking contaminants on the way. Typically there is a side-roll tarp or throw tarp system and dewatering option available. They can also be built completely solid, without a tailgate, to serve as a mixer box. They are certified liquid-tight and tested on site. 800/233-0867; www.bucksfab.com.



## CONSOLIDATED FABRICATORS ROLL-OFF TANK

Roll-off tanks from **Consolidated Fabricators** can be used with pumps, filters, dewatering units and vacuum boxes. Designed for on-site storage of water and liquids, the 8,500-gallon tank with 1/4-inch-thick walls measures 20

feet long, 8.5 feet wide and 95.5 inches high. With a roll-off under-frame, the tank has smooth interior walls, multiple valves and interior stainless steel ball float with exterior tank level gauge. **800/635-8335**; www.con-fab.com.

#### CUSTOM MANUFACTURING ROLL-OFF SLUDGE CONTAINER

Roll-top roll-off sludge containers from **Custom Manufacturing** store and transport a wide variety of waste. They



have continuously welded seams, a fully gasketed rear door, a knife-edge seal, adjustable hinges, ratchet binders, secondary release grab handles located on the bottom side of the door, and 3/16-inch-thick walls and floor. Each lid measures 5 by 7 feet, with a 1- by 2-inch closed-cell gasket. One lid rolls to the bulkhead end and one rolls to the rear door end, leaving access to the center of the container. Units can be customized with either a top- or side-hinge rear door. **405/692-6311; www.custommanufacturing.us.** 



#### DRAGON PRODUCTS LIQUID-TIGHT ROLL-OFF

The lightweight liquid-tight roll-off container from **Dragon Products** is compatible with the company's line of roll-off trailers. It can be used by

liquid waste haulers, environmental cleanup companies, hazardous waste transporters, and oil and gas service companies. In addition to being liquid-tight, the container has a high payload and long life span. It has continuous-welded construction, a seven-gauge floor, 10-gauge sides, interior plastic liner hooks, front and rear grounded rollers, and a side-to-side EPDM E-Seal lid. Options include heavy-duty long sills, an interior ladder, and a top- or side-hinge tailgate. 877/231-8198; www.dragonproductsltd.com.

## FLO TREND SYSTEMS SLUDGE MATE

Sludge Mate container filters from Flo
Trend Systems dewater biosolids,
water treatment residuals, septage,
grease trap and slaughterhouse waste,



and sump bottoms. The closed system provides odor control, no spillage, reduced maintenance and weather independence. Units have 10-gauge reinforced walls and a seven-gauge steel floor. Options include peaked roofs with gasketed, bolted-down access hatches, drainage ports, inlet manifolds, floor filters and side-to-side rolling tarps. They are available in roll-offs and in trailer and tipping-stand mounted configurations. Capacities range from 5 to 40 cubic yards. **713/699-0152; www.flotrend.com.** 



#### WASTEQUIP DEWATERING CONTAINER

Dewatering containers from Wastequip reduce the cost of waste disposal by separating liquids from solids. The container's dewatering shell is easily removed with

bolts, so it can also be used as a sludge container. It has a 1/4-inch-thick floor, seven-gauge sides, continuous inside welds, a solid steel nose cone and an outside rail understructure. The container's rear door is gasketed with neoprene rubber or T-gaskets, and is hydro tested to prevent leaks. The container's dewatering shell has 1/2-inch flat No. 13 expanded metal sides with J hooks on the sides, front and door. Standard sizes are 20-or 25-cubic-yard round-bottom or rectangular containers. Custom sizes are available. 877/468-9278; www.wastequip.com.

(continued)



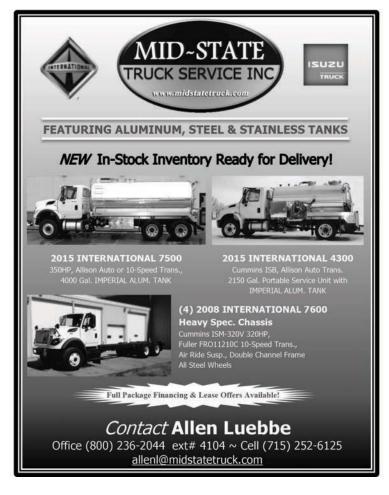


non-poisonous product that will not harm plumbing or septic systems.

www.centurychemical.com

28790 County Road 20 W. Elkhart, IN 46517

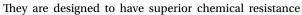
574-293-9521 - 800-348-3505



#### **SLUDGE INJECTORS**

### SNYDER INDUSTRIES CHEMICAL INJECTION TANK SYSTEM

Chemical injection tank systems from **Snyder Industries** are available in 65-, 125-, 225- and 335-gallon sizes in both HDPE and stainless steel.

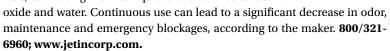


and are compatible with a range of chemical applications, including inhibitors, scale control chemicals, surfactants, foamers and defoamers. Tanks are impact resistant and designed to withstand extreme weather conditions. They are lightweight and economical to transport. Tanks are molded as one piece, and seamless construction helps eliminate potential leak areas. Enclosed containments keep wildlife and livestock from getting into the system. 888/422-8683; www.snyderindustriestanks.com.

#### **SLUDGE TREATMENT**

#### JET INC. BIO JET 7 PLUS

**Bio Jet 7 Plus** nonhazardous and nontoxic bacterial aid from **Jet Inc.** is used to degrade FOG, fatty acids and lignin, while lowering BOD, COD and nitrates. When added to a system, the bacteria attack grease and organic materials, converting them to liquid and then into carbon di-





#### NORWECO BIO-GEM

**Bio-GEM** grease-eliminating microbes from **Norweco** blend cultured bacteria, aggressive enzymes and natural growth accelerators to digest grease, fats and oils. The product is used in aerobic or anaerobic conditions to convert common grease, fats and oils into carbon dioxide and water. Regular use is promoted to help eliminate odors, stabilize effluent quality, reduce system maintenance and minimize the frequency of tank pumpout. Environmentally safe, it is available in 1- or

5-gallon containers or 55-gallon drums. 800/667-9326; www.norweco.com.

#### STORAGE TANKS

#### ELDRED ENVIRONMENTAL & EXPORT STORAGE BLADDER



BIO JET-

Flexible storage bladders from **Eldred Environmental & Export** are available in sizes up to 50,000 gallons, with fabrics suitable for graywater, drinking water, and fuel or chemicals, 32 to 46 ounces per square yard. Fittings and valves are available from 1.5 to 4 inches in PVC, aluminum, polypropylene, stainless steel or brass. Custom-sized secondary containment berms are also available for bladders, steel tanks, trailers and vehicles for spills and decontamination. **800/613-3640**; www.eldredenvironmental.com.

#### **CASE STUDY**

## FILTRATION TUBES USED TO REMOVE SEDIMENT FROM POND

**Problem:** A community pond in Lenexa, Kansas, deteriorated, became an eyesore and could no longer sustain aquatic life due to a growing sediment problem. It was

determined that approximately 6,000 cubic yards of sediment would need to be removed to bring the pond back to a healthy state.

Solution: Envirotubes from Industrial Fabrics were used to clean the pond with minimum erosion and hauling. The tubes were staged so that 12 mil reinforced single-piece liner was placed on the lowest terrace that had a 24-inch earthen berm built on three sides. The liner was draped over the berm and placed up and over the terrace to the



next level. A sump well 24 inches deep was excavated in the corner closest to the project pond to collect decant water and return it back to the pond using a self-priming diesel pump with a 4-inch valve. All terraces were graded flat for the tube with a 5-foot perimeter graded at a 1/8-inch-per-foot slope to drain the water to the next lower terrace — or in the case of the lowest terrace — to the sump corner.

**Result:** The sediment was removed, and after a 120-day dewatering and dehydration period, the material shrunk at a ratio of 3-to-1 so that only 2,000 of the 6,000 cubic yards removed had to be taken away. Since a neighboring property owner was looking to add elevation to a sunken area, the remaining hardened sediment was used as fill. **800/848-4500; www.envirotubes.com.** 

#### HUSKY PORTABLE CONTAINMENT BLADDER TANK

Husky Portable Containment Bladder Tanks are manufactured to meet specific requirements and specifi-



cations. They are available in sizes from 25 to 50,000 gallons, from materials including XRs, PVCs and urethanes (MIL Spec). Fittings are PVC (NSF 61), aluminum, stainless steel and brass from .75 to 6 inches. Bladders include all-stainless-steel hardware, including access panels, maneuvering straps near the corners and every 5 inches down the sides, flame arrestors, double T-style vents and mushroom vents. Storage bags are included, with optional ground covers and sunscreens in various weights. All tanks come with field repair kits. **800/260-9950; www.huskyportable.com.** 



## IMPERIAL INDUSTRIES DRY BULK STORAGE

Welded, one-piece, dry bulk storage silos from **Imperial Industries** can be customized. Bulk silos and tanks need mini-

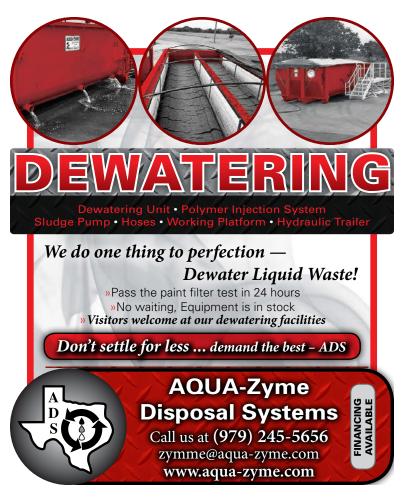
mal maintenance, and save material-handling costs over many years of use. Tanks are available in carbon steel, stainless steel and aluminum, in silo diameters to 16 feet, and in capacities to 12,000 cubic feet. Paint finishes per the Imperial standard or customer paint specifications are available on carbon steel silos. Standard guardrail and ladder assemblies in aluminum, carbon steel and galvanized steel ensure easy assembly and maintenance-free durability. 800/558-2945; www.imperialind.com. ■













## www.LonghornTank.Com **Truck Mounted** Tanks for Septic, Portable Toilets, **Grease Traps, Etc.** Aluminum, Stainless. and Steel **Vacuum Trailers** Call or Email Us For a Quote Today in any Size Longhorn Tank Company 800-422-9840 sales@longhorntank.com PO Box 1147 Gravette, AR 75736 Fax 479-787-6935



1737 S. VINEYARD AVENUE • ONTARIO, CA 91761 PHONE 909-930-6244 • TOLL FREE 800-334-1065 • FAX 909-930-6237 www.NUCONCEPTS.com





## CAMERA SYSTEM REMOVES BLIND SPOTS WHEN OPERATING VACUUM LOADER IN RAIL SWITCHYARDS

Designed to eliminate blind spots when operating the High-Rail vacuum loader on railroad tracks in switchyards, the three-camera system option from **Guzzler Manufacturing** provides the operator in the rear-mounted chair with a clear view of his surroundings.

"The rear of the unit becomes the front when operating the High-Rail in a rail switchyard," says Ben Schmitt, product manager for Guzzler. "When the operator is on the rail he can only see in front of him. He can't see what's behind."

Typically a two-member crew will have active tracks nearby or support vehicles on the rail behind them that are difficult to see when operating the loading. A worker also might be on the rail as a supervisor or assistant, walking beside the loader toward the operator and could be inadvertently struck by either a swinging boom or the truck itself when it backs up.

"Our goal is to improve visibility, allowing the operator to see equipment on the rail behind him or to see people walking beside the truck," he says.

Available on new models of the High-Rail, the camera system includes a 7-inch, weatherproof LCD monitor visible in bright sunlight and cameras mounted on the front and sides of the vacuum truck to provide a wide, real-time view, even in extreme weather conditions. The operator can simultaneously monitor the view from each camera on the LCD screen, including the rear of the truck, passenger and driver-side blind spots. Covers protect the camera lenses when transporting the vacuum loader from job site to job site.

"It's basically like a backup camera in your car," Schmitt says. "The camera automatically comes on when operating on the rails. The operator who could only see in front of him can now see 360 degrees around the truck. It provides a lot more safety for the operator, the equipment and everyone around him."

The High-Rail loader quickly converts to operate on rails or roads and features a loading boom, hydrostatic creep drive and rear-mounted operator chair. It can remove ballast, contaminated materials and spills from rail beds. Material is stored in the collection tank for treatment, disposal or reuse. **800/627-3171; www.guzzler.com.** 

#### LOFTNESS HYDRAULIC OIL COOLER

The Cool Flow hydraulic oil cooler from Loftness Specialized Equipment reduces the risk of overheating in skid-steers and hydraulically powered attachments. The automatic, thermostat-controlled fan is designed to provide cooling when needed, even when an attachment is not being



used. The cooler attaches to the roof of the skid-steer where it is less susceptible to vibration, back pressure, debris and potential impact. Engineered to allow full hydraulic flow to the attachment in either direction, the cooler enables the operator to run the attachment in reverse and protects the unit in case hydraulic hoses are accidently reversed. The oil cooler offers up to 40 gpm flow capacity and is compatible with all brands of skid-steers. 800/828-7624: www.loftness.com.



#### VACTOR HYDROEXCAVATOR BLOWER OPTION

The Robuschi blower option is available on the HXX HydroExcavator from Vactor Manufacturing. The blower is rated for 6,176 cfm and 28

inches Hg. The hydroexcavator also has a 3,000 psi variable water multi-flow pump with DigRight technology that allows the operator to select a maximum water pressure limit. **800/627-3171**; www.vactor.com.

### REELCRAFT REEL PAINT OPTIONS

Hose reels from Reelcraft Industries are available in bright red as well as secondary colors (white, black, blue, gray) and special orders. Parts are coated with a polyester powder coat for a corrosion-resistant finish. Paint samples are available. **800/444-3134; www.reelcraft.com.** 





#### VANAIR GAS ROTARY SCREW AIR COMPRESSOR

The Viper gas rotary screw air compressor from Vanair Manufacturing delivers 60 to 80 cfm at 100 to 150 psi and features an EFI certified Kohler engine. The 42-inch-long by 21-inch-wide by

30-inch-tall compressor fits behind the cab or can

be mounted on the side-pack. 800/526-8817; www.vanair.com.

#### HINO CLASS 4 155 TRUCK

The 14,500-pound GVWR Class 4 155 cabover truck from Hino Trucks is powered by a 210 hp J05E-TP engine. A double cabover 155-DC is also available. 248/699-9300; www.hino.com.





## COOPER ROADMASTER DROP-DECK TRAILER TIRE

The RM272 Roadmaster tire from Cooper Tire is engineered to withstand the demands of drop-deck trailers. The tire features four-belt steel casing, 16/32-inch thread depth and is available in size 255/70R22.5, load range H. **800/537-9523; www.coopertire.com.** 

## NLB HIGH-PRESSURE WATERJET PUMP UNIT

The 350 Series trailer-mounted 350 high-pressure waterjet pump unit from NLB Corp. has a 350 hp diesel engine. Rated for a maximum operating pressure of 20,000 psi, it can be converted to operate at 8,000, 10,000 and 15,000

psi. Flows range from 26 to 63 gpm. The pump is available in an UltraGreen configuration for compliance with the latest Tier 4 Final emission requirements. **248/624-5555**; www.nlbcorp.com.



#### LOWELL MULTI-ANGLE RATCHET WRENCH

The Model 8E two-in-one ratchet wrench from Lowell Corp. has 36 teeth and a 10-degree handle throw for working in confined areas. The ergonomic stamped steel handle is 17 inches long, 1/2-inch thick and weighs 2 3/8 pounds. The wrench has a torque rating of 100 ft-lbs and is available

with 1 1/4- by 1 1/16-inch and 1 1/8- by 15/16-inch hex socket combos. **800/456-9355; www.lowellcorp.com.** 

#### COXREELS T SERIES STAINLESS STEEL REELS

Spring-driven stainless steel T Series hose reels from Coxreels feature an extra-large chassis with dual pedestal-style design and Super Hub that provides triple-axle support to reduce vibration and strengthen the structural integrity of the reel. The reels are made from electro-polished stainless steel with stainless steel fluid paths designed to offer noncorrosive performance in required applications. 800/269-7335; www.coxreels.com.



## MARENGO SMART REMOTE TANK MONITORING

Tank-Intel smart remote tank monitoring from Marengo Fabricated Steel is a hardware/software-based system that works on any tank. Dual-level sensors deliver two liquid tank levels to a smart-phone, PC or tablet. Changes in the chemical and physical properties of the measured substance do



not affect the sensor. The customizable system can withstand temperature extremes. 800/919-2652; www.mfsltd.com.



#### TOW-LET TWIN FLUSH RESTROOM TRAILER

The Twin Flush portable restroom trailer from Tow-Let Manufacturing features a 250-gallon holding tank with easy-dump rear valve, standard heavy-duty flushing restrooms, 215 gallons of freshwater for the restrooms and 32 gallons for the hand-wash sinks. The solar-powered trailer includes in-

terior/exterior LED lights, tool storage box and fold-down steps with stabilizer jacks. **712/623-4007**; www.tow-let.com.

## QUICK-CONNECT PREASSEMBLED DISCHARGE PIPE

The preassembled PHCC Pro Series quick-connect discharge pipe for sump pump installations from Glentronics includes a 1 1/2-inch rubber coupling and check valve, pre-cemented female adapter, pre-drilled weep hole to prevent air lock, discharge pipe and pre-cemented male adapter. 800/991-0466; www.stopflooding.com. ■



## DEWATERING BELT PRESSES CENTRIFUGES



## American Power to provide HTC with natural gas systems

American Power Group will provide its turbocharged natural gas dual fuel system for Harrison Truck Center's Freightliner and Western Star product line. HTC will install APG's dual fuel systems and associated natural gas storage tanks at its production facility in Elk Run Heights, Iowa.

#### General Pump names sales representative

General Pump promoted Nick Viestenz to outside sales representative. He has been with the company for 12 years, working in research and development, customer service and inside sales.



Nick Viestenz



#### Safety Today launches websites

Safety Today launched its website for U.S. customers, www.safetytoday.com, and in Canada, www.safetytoday.ca. Product libraries on each site are presorted in line with relative national standards, including the ANSI and CSA International. The site

also includes an overview of available safety training initiatives.

#### Amthor International partners with Alkane Truck

Amthor International partnered with Alkane Truck Co. of Myrtle Beach, South Carolina, to offer an alternative energy cabover chassis. Amthor manufactures truck-mounted tanks serving the refined fuel, propane, mining, vacuum and septic, portable restroom, water, well drilling and construction industries. Alkane specializes in medium-duty trucks, medium heavy trucks and heavy-duty tractors that run on liquid propane autogas, compressed natural gas or liquid natural gas.

#### Legacy Equipment expands facility

Legacy Equipment completed a 16,000-square-foot addition at its Salt Lake City facility. The facility includes six service bays, a 6,000-square-foot warehouse and paint booth.



#### NOWRA recognizes wastewater program manager

The National Onsite Wastewater Recycling Association (NOWRA) presented Joyce Hudson, senior environmental engineer and decentralized wastewater program manager with the U.S. EPA, with a commemoration of appreciation for her work on emerging issues and education/outreach for the onsite wastewater industry.

#### Hyundai names Pinnacle Award winners

Hyundai Construction Equipment Americas named the 2014 winners of the Pinnacle Award, presented to the company's leading North American dealers. Cisco Equipment, with two of the top 15 salespeople in the United States, was named top performer of 2014. Other winners were Four Seasons Equipment, May Heavy Equipment, Nueces Power Equipment, Rob's Hydraulics, Team Boone and Woodland Equipment.

## GapVax website enables users to build their own truck

The Build-A-Truck feature from GapVax enables website visitors (www.gapvax.com) to design their own equipment by choos-



ing options that best meet their needs. Selecting Municipality or Contractor, users can design an MC Series combination jet/vac or HV Series wet/dry vacuum truck. Hydroexcavator options include debris and water tank sizes, debris tank material, duct work and cyclone material, interior debris tank coating, liquid load indicator, cold weather package, off-load, sound, boom and lighting options. Other options include toolbox, chassis, gauges and electronics. When finished, users can submit their design and receive a formal proposal for their truck.

#### Southwest Products opens sales, service center

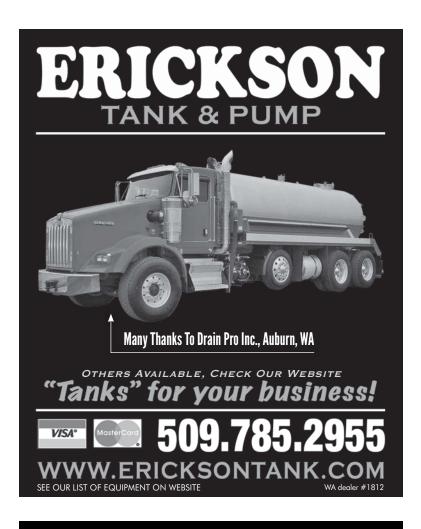
Southwest Products (SWP) opened a sales, parts and service center in Ridgefield, Washington. SWP manufactures customized service trucks, industrial tanks and generator sets. The company also was named a distributor for IMT, manufacturer of mechanics trucks.



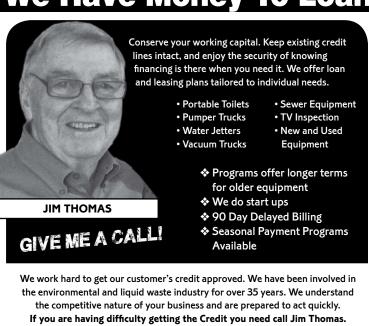
### SSPMA elects officers, directors

Jeff Hawks of Champion Pump was elected president of the Sump and Sewage Pump Manufacturers Association (SSPMA). He replaces past-president Mark Huntebrinker of Zoeller Co. Other officers include Scott Stayton, vice president, and Jeff Goodenbery, secretary-

treasurer. Directors elected at the 2015 Spring Meeting were William Gell, Deron Oberkorn, Kent Ralston and Joe Zimmerman. ■



## **We Have Money To Loan**



Toll-Free 877-333-4539 • JimThomas@KeyCommercial.com

www.keycommercial.com



#### Marketplace Advertising.

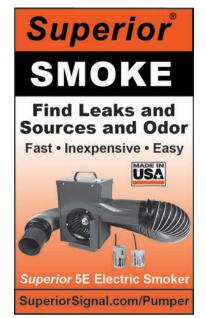








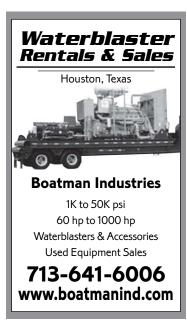




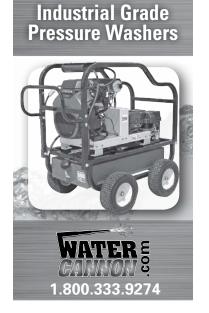






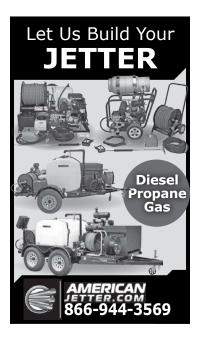






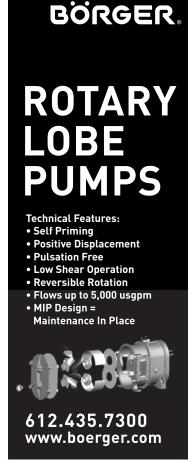
#### **Marketplace** Advertising













#### **Coagulants and Flocculants** for Septic, Grease, Municipalities and Industry · Dewatering polymers for all dewatering equipment · All forms: Dry and Emulsion Variety of packaging sizes to meet customer needs . Both East & West coast shipping points · Expert technical staff · Specific solutions for our Save Money • Save Time • Save Polymer customers AQUA BEN 1390 N. Manzanita St. Call Toll-free: 877.771.6041 CORPORATION Orange, CA 92867 www.aquaben.com • sales@aquaben.com



#### **Marketplace** Advertising

#### DREDGING & DEWATERING SERVICE

- Municipal and Industrial Digester and Lagoon Cleaning
- Double Belt Filter Presses Liner Repair & Replacement



(513) 241-1600 Fax (513) 756-1995

www.fluidtechnologyinc.com

## classifieds

see photos in color at www.pumper.com

#### **ADVERTISING**

SANITATION REMINDER POSTCARDS, BUSINESS CARDS AND CUSTOM COLOR DECALS: We are your resource for marketing your business. Call 781-844-8600 or visit us and see samples at www.sanitationpostcards.com (PBM)

#### **AERATORS**

**Blue Diamond ET P 80** heavy-duty linear diaphragm air pumps \$187.08. 800-717-8807 www.Roland-Turbo-Aerator.com www.whiteseptic.org (PBM)

Aerators: Multiflo alternative replacement \$325 + shipping. Alternative replacement, NEW FILTER SOCKS, 30 per case \$370 + shipping. Spring clips to hold filter socks in place, \$3.86 per clip. Alternative Jet Aerator available \$425. Call us at 800-717-8807 or email us at fabulousfungi@gmail.com. www.Roland-Turbo-Aerator.com. Multi-Flo® and NAYAD-IC® are registered trademarks of Consolidated Treatment Systems, Inc. used here for reference purposes only. (PBM)

#### BACTERIA/CHEMICALS-SEPTIC



#### **BUSINESSES**

National Grease Recycling Inc. Let us teach you how to recycle restaurant's waste, fryer grease and oil (yellow grease) only. 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. References available - many success stories. Dewey Walker, 813-704-5090 or 813-758-2552. (PBM)

Septic & grease trap pumping business (well-established for 50 years), located on the Eastern Shore (DE, MD, VA). Over 2,000 residential customers. '07 Freight-liner - 2,500 gallon, '99 Volvo - 3,800 gallon; '09 Pipehunter w/'05 Ford F250, camera w/ locator, \$650,000. Possible owner partial financing. Also available: 14 acres, house, 2 shops, land application permit for grease trap waste. Serious inquiries only. Contact mike@jobsitepumping.com 443-235-5979 (P06)

For Sale: Turnkey septic pumping business in picturesque southern tier of Western New York, Established in 1988, owner-operated serving four counties in NY and PA. Excellent reputation. Comes with 2006 International 5600i with 2006 PikRite 3.300-gallon tank and Jurop pump. Truck is in excellent condition. 40x60 heated shop, plus 2-car garage with small apartment upstairs. Property consists of 97 acres - 20 acres state-approved land spread site. 60 acres all gravel ground with a completed application for NY mining permit, never activated. Room to grow portable toilets, repairs, installation. Presently operated part-time/seasonal. Grosses \$75,000 per year. Comes with all equipment to run business and maintain property. Health issues force early retirement. Asking price: \$595,000 - no financing. Serious inquiries only. 716-933-5800

Complete septage management company. Septic pumping, DEP-approved dewatering facility and DEP-approved composting facility. Large client base. Everything included to continue this successful business. Owner retiring, will train new owner. Possible owner-financing with qualified buyer. Located Central Coastal Maine. Contact: Ocean's Edge Realty LLC, PO Box P, Bucksport, ME 04416. 207-469-1046 email: office@oceansedgerealty.com (P08)

Septic cleaning business for sale in eastern PA. Owner retiring. Well-established customer base. Two pumpers, assorted equipment, real estate negotiable. Serious inquiries only. No brokers. Contact pasepticbiz4sale@gmail.com (P07)

Minnesota family-owned septic service. SE Metro, three-county service area. 1991 International 2,500-gallon pumper - new LMT tank in 2010. 1991 International 3,400-gallon pumper - new Jay's tank in 1998. Both good everyday runners. 3,000+ QuickBooks customer database. Serious inquiries only. Call Bob 612-730-5870. Mon-Fri 8-5 CT. (P08)

PORTABLE TOILET COMPANY established for over 25 years in the metro New York area for sale. 250 portable toilets, 10-position transport trailer, 27 ft. comfort trailer, ADA units, sinks, hand sanitizers, holding tanks, etc. Strong customer base includes contractors, special events & government contract. Owner retiring, serious inquires only. Email outhouseinfony@gmail.com (P06)

Full-service septic business in the Northwest Florida Panhandle: Three (3) newer pump trucks, monorail truck, dump truck. Land application site also. 20 years of customers. Running two pump trucks seven days a week and a set crew. Plenty of work. Owner ready to pursue other business ventures. \$800,000. 850-902-9044 (P07)

Septic tank cleaning & inspection service business for sale in Central Maine. Owner is branching out after 20 years and wants to sell this part of the business. Profitable, turnkey business with a loyal customer base. Two pump-truck operation (1) 2000 GMC - 2,500-gallon capacity, 136,000 miles. (2) 2004 Peterbilt — 4,500-gallon capacity, 129,000 miles. Serious inquiries only! \$257,000. Call 207-782-1620 or email septicbizsale@gmail.com (PBM)

PARADISE FOR SALE! Bee's Honey Pots, Inc., portable toilet company established in 1983 in the beautiful Florida Keys is for sale. Based on Big Pine Key, Bee's is the oldest established and largest portable toilet company in the Keys. Sole owner and operator for the past 30+ years wants to go fishing! Interested? Call 305-872-2287. (P07)

Septic Tank Service Business for Sale, Northeast Florida. Owner wishes to retire. Callahan area north of Jacksonville, a fastgrowing area in Florida. Profitable, turnkey business. 29 years in business with loyal customer base. Two pump tuck operation: (1) 1996 International 4900: DT466, 5-speed transmission, 2-speed axle. 2,500-gal-Ion capacity. 297,000 miles. Good tires, excellent condition. (2) 2000 Freightliner FL70: 8.3 Cummins, 6-speed transmission. 2,400-gallon capacity. 195,000 miles. Good tires, excellent condition. Business includes complete onsite lime 20,000-gallon stabilization plant in Northeast FL. Owner will train and assist with licensing. Call for more information. Kenny Farmer 904-879-4701 or 904-545-0357.

Want to add to your toilet business? Temporary Fence business located in Riverside County of CA. Asset sale \$750,000 asking price, terms available to right buyer. Contact jrandle598@msn.com. Serious buyers only.

(P06)

Established 1964: A turn-key operation with customers based in beautiful Southern Oregon. Portable toilets and septic pumping business. 2.05 acre property with storage tanks. Building includes storage, office space and more. Over 500 portable units, 5 handicap compliant. 6 service vehicles, 3 septic pumping trucks. \$400,000. Serious inquires only. Office 541-772-9484 (P07)

**www.RooterMan.com.** Franchises available with low flat fee. New concept. Visit website or call **1-800-700-8062.** (PBM)

**ARE YOU MOVING TO FLORIDA?** Would you like to start a septic and sewer cleaning business? I have license - will sponsor. For more information call Larry at 931-335-3231 or 931-248-1284. (PBM)

#### **COMPUTER SOFTWARE**

FreeServiceReminderSoftware.com, FreeServiceDispatchSoftware.com, FreeRouteManagementSoftware.com. (P06)

#### **DEWATERING**

Portable septic and grease receiving stations, dual-screen design. Screens that really work - simple, non-mechanical. Set it up anywhere. 208-790-8770 screencosystems.com screencosys@gmail.com (PBM)

Westfalia Centrifuges: 3-stage Westfalia stainless steel separator MSA 120-01-076. Completely rebuilt. \$75,000 0BO. 2-stage Westfalia decanter 84" x 24". Completely rebuilt. \$70,000 0BO. Both units set up for wastewater or cooking oil. Call 951-545-0649

FKC Screwpress with lime bag system and boiler. \$125,000 FOB, Charlevoix, MI. 231-330-3559. jwc@siteplanning.com (P08)

Do you DEWATER with a BOX? If so you really need to check us out! ITRDewatering.com 317-539-7304 (P10)

## DRAIN/SEWER CLEANING EQUIPMENT

2006 Camel combination with Sterling. 2,000-gallon tank, 1,500-gallon water capacity, 82K miles, good tires. Asking \$85,0000. Call Brig 480-620-2517. (P06)

#### **DRAINFIELD RESTORATION**

**Soil Shaker 2000.** Universal skid steer attachment for drainfield restoration. Buy factory direct. \$6,250. Check us out on YouTube or call 406-670-8318. (PBM)

New and used terralifts for sale starting at \$20,000 used and \$38,000 new. Financing available. Call John at AerraTech 413-298-4272. (PBM)

SUBMIT
YOUR
CLASSIFIED AD
ONLINE at
www.pumper.com

PLACE YOUR AD ONLINE AT www.pumper.com - IT'S ALWAYS THERE TO MEET YOUR BUSY SCHEDULE

#### **DREDGES**



2009 IMS 5012 Dredge: 325hp engine, 22-foot digging depth. Ergonomic cab with joystick controls. Excellent shape. Unit is ready to go to work. ....\$235,000

For more pictures email

terrv@merrellbros.com Call 800-663-8830. IN

P06

#### **GREASE TRAP SEPARATOR TANK**

For Sale: JWC Septage Receiving Station \$25,000 FOB. Charlevoix, MI 49720. 231-330-3559 jwc@siteplanning.com

#### **GREASE UNIT**

Pre-owned 2008 Peterbilt 340 cab and chassis with a 3,000 U.S. gallon carbon steel vacuum tank unit with drum holder behind cab. (Stock# 6641CC) www.VacuumSalesinc.com (888) **VAC-UNIT (822-8648)** 

#### **HAZARDOUS WASTE UNITS**



2007 Freightliner with Presvac 3.200gallon DOT-certified stainless steel dump door with Demag 200 750cfm 27" vacuum pump. 46k rears, 18k front. 80,000 miles. Excellent condition.

> **KLM Companies** 617-909-9044

PRM

2015 Presvac/Freightliner: DOT certified 3,200-gallon polished stainless steel. Full dump/door vacuum truck with Moro PM100 vacuum pump. Automatic, Cummins power. 46k rears, 20k front. Must see! KLM Companies 617-909-9044 (PBM)

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 vacuumpressure pump installed on a 2015 Peterbilt 348 cab and chassis. (Stock #13587 D-E) www. VacuumSalesInc.com, (888) VAC-UNIT (822-8648) (PBM)



(4) Stock new 2015 Peterbilt 348 chassis, auto. transmission, Brenner DOT code 407/412 tank, full-opening rear door and hoist, Moro 630cfm vacuum pump, loaded. Visit www.NewVacuum-Trucks.com for more info and pictures.

Call 888-432-9070 or email P06 Info@UsedVacuumTrucks.com

Pioneer 5,500 U.S. gallon, carbon steel trailer with pump package. (Stock# 0220C) www. VacuumSalesInc.com (888) VAC-UNIT (822-8648) (PBM)

#### **HYDROEXCAVATING EQUIPMENT**



**New Petrofield Industries Tornado** Hydrovac trucks, in stock and in production for quick delivery. Visit www. TornadoHydrovac.com for more information and pictures.

> Call 888-432-9070 or email Jeff@TornadoHydrovac.com P06

#### **INSURANCE**

Paying too much? Slow certificates? Claim problems? Rates keep going up? Want a fresh start? We can help: Call 800-454-1970 (PBM)

#### JETTERS-TRAILER



**Xtreme Flow Trailer Jetter Hot/Cold!** Model# HJ2TA8536, tandem axle trailer, 35 hp Vanguard 8.5 gpm @ 3,600 psi, 325-gallon water tank, 300' hose, General pump. Fully loaded! List \$36,995. On sale for \$32.995.

> 800-213-3272, www.hotietusa.com

PBM

2008 Ford PipeHunter: 7844TMV. 1/2" hose. Giant jet pump 14.2gpm @ 4,000psi. Tuthill blower, 1/2-yd. debris tank. John Deere rear engine, 294 hrs. Ken's Truck & Equipment: www.khtrucks.com 972-938-1905 or 214-632-5277

2008 GMC PipeHunter: John Deere rear engine, 700-gallon poly water tank, 3/4" jet hose, Giant pump. Ken's Truck & Equipment: www.khtrucks.com 972-938-1905 or 214-632-5277 (PBM)

#### **JETTERS-TRUCK**



1993 GMC 1-ton Jetter: 35gpm FMC pump, 3/4" hose, 500-gallon plastic tank. .....\$14,500 OBO Other jet trucks and trailers available.

608-835-7767, WI

PBM

PBM

#### **JET VACS**



**2005 Ford F650:** CAT C-7 (210hp); 6-speed; A/C; 26K GVW. Vacmaster VNDS4000 vacuum excavator; JD diesel (155hp); D+W blower; Boss air comp; 450-gallon Spoil tank w/hvd. dump. Stock# 8364; 67,865 miles. .... \$79,500

> 800-520-4704, PA www.Opdykes.com



1999 Freightliner Guzzler w/Cummins M-11, 350hp, Allison HD4060, 64k GVW. Guzzler combo unit w/stainless water and debris tanks, extendable & rotating hose reel, extendable boom. Roots 824PD blower, Meyers 80gpm pump. Ready for work. Photos available. .....\$58,000

708-878-8401. IL



Price Reduced! 1997 Vactor 2110: 10yard debris tank, 1,000-gallon water capacity, 2-stage fan, 80gpm water pump. Ford chassis with CAT engine, air-ride seat. Recently installed new instrument panel. .....\$39,500

> **Call Brown Equipment** 260-747-2312. IN

P06



2001 Peterbilt 320 Vactor 2115 combination sewer cleaner: Miles - 39,215. Hours - 5,948. VIN - 1NPZL00X11D71 3164. Allison 4560 automatic, Cummins ISM 350hp. GVWR - 66,000 (front 20k). Vactor Model 2115-36: 15-yard debris tank. SN - 00-11-7495. 1,500-gallon capacity at 80gpm. Southern truck no rust. Ex-city owned and maintained. .....\$84,900

Email for more photos:

dmclaycomb@gmail.com Call Don 812-454-1602. IN PO7

2007 Mack Guzzler: Damaged, rear unit new in 2011. Ingersoll Rand Air Solutions Hibon model SIAV 8702 blower. Ken's Truck & Equipment: www.khtrucks.com 972-938-1905 or 214-632-5277

Jack Doheny Supplies Inc. offers a full range of late model combo units and DOT industrial vacuum loaders. Call us @1-800-3D0HENY.

2009 Sterling Vac-Con: VPD3616LHAEN S\N: 09085083. 3,975 main engine hours. Bean jetting pump. Roots 824 RCS blower, 16-yard debris tank. New aluminum extension tubes. Hydraulic-driven jetter pump. Ken's Truck & Equipment: www.khtrucks.com 972-938-1905 or 214-632-5277

2006 International VacCon: CAT pony motor, 3-stage fan, 12-yard tank, 1,300-gal-Ion water tank. \$88,000. Call Jeff Brooks @ 317-258-4900 (P07)

2002 International Guzzler: 54,000 miles. 10-speed, 27" Roots blower, Stainless steel tank. Stk# 2300. Ken's Truck & Equipment: www.khtrucks.com 972-938-1905 or 214-632-5277 (PBM)

#### **JET VACS**

2006 International Vactor 2112\15: 9,300 hours, S\N: 05-07V-9443, Vactor jet pump 80gpm @ 2.000psi, 600' 1" new hose, 800' hose reel capacity. Pump-off system. Ken's Truck & Equipment: www.khtrucks.com 972-938-1905 or 214-632-5277

1998 Volvo GapVax: Stk# 2301, VIN# 4VHJCB JF8WN857157. Stainless steel tank, N-14 Cummins, 9-speed Fuller transmission, Roots 27" blower. Ken's Truck & Equipment: www.khtrucks.com 972-938-1905 or 214-632-5277

Vac-Con V390LHA combination unit with Roots 827 blower, 1999 International Model 2554 cab and chassis. (Stock #3918C) www.VacuumSalesInc.com, (888) VAC-UNIT (822-8648) (PBM)

Vac-Con industrial machine mounted on a pre-owned 2006 Sterling cab and chassis. (Stock #8593C) www.VacuumSalesInc. com (888) VAC-UNIT (822-8648) (PBM)

2006 Volvo cab & chassis with a Vactor 2110 combination vacuum loader and high-pressure sewer cleaning system. (Stock #3483C) www.VacuumSalesInc.com (888) VAC-UNIT (822-8648) (PRM)

2005 Kenworth T800 Vactor 2115: 15-cubic-yard hopper - 1,500-gallon water capacity. Roots 1024 Ras-J 18" blower 80gpm/2.500psi water system, 800' x 1" sewer hose/2,500psi. 2005 Kenworth T800, CAT C-470hp. Chassis tri-axle. Eaton-Fuller manual transmission with push axle. \$193,000. Call Jeff Brooks @ 317-258-4900 (P07)

#### **LEASE/FINANCING**

Western Equipment Finance, a bankowned direct lender, is committed to continuing to help you prosper. All equipment types, new or used; we have the best rates and terms you deserve. App-Only Financing and credit decisions within an hour. Call the team you can trust, Jim Stekl at Western Equipment Finance 701-665-1647. jim.stekl@westernequipmentfinance.com (PBM)

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, (PBM) 877-804-2274.

100% financing available. Simple one-page application, same-day response. For more information please call THE LEASING EXPERTS @ 888-505-0060. WWW.TLEJAX.COM (P07)

#### **PARTS & COMPONENTS**

Imperial Industries, Inc. F&D heads - steel, aluminum or stainless, manufactured at our facilities and MZ brass valves and accessories, direct from Italy. Call 800-558-2945 for prices you can't afford to miss out on. (P07)

#### **PORTABLE RESTROOMS**

200-300 Used portable restrooms for sale. All kinds, in good condition. \$275 to \$350. Buver responsible for shipping. Please call 239-334-7689 ask for Kevin. (P06)

350+ portable toilets for sale. We have Tuff-Jon I units in varying condition with prices ranging from \$250-\$350. We are located in Canton, NC, 828-648-3170 (P08)

300 used toilets: Satellite Tufways and Poly-Portable Integras, green and blue colors available. All in good condition. \$275 to \$350. Quantity discounts available. Sold in loads of 28 or more only. 920-322-3342 (P07)

28 blue PolyPortables standard units, construction grade. All units have hand sanitizers. Approximately 10-12 years old, \$225 each. Near Toledo, Ohio. Call 419-877-5351. (P07)

For sale: Construction-use PolyPortables. 59+ portable toilets (includes some with lifts), handicapped portable toilets, freestanding hand stations, 250-gallon portable holding tanks, and containment pans. As well as miscellaneous potty supplies such as extra doors, vents, etc., Must sell all together. Asking price \$10,000. Contact 505-927-0871

100 tan PolyPortables standard units, construction grade. Approximately 10-12 years old. \$150 each. Located in Albuquerque, NM. Call 505-345-3965. (P08)

#### **PORTABLE RESTROOM TANKS**

Skid-mounted portable restroom tank. 400 gallons waste, 200 fresh water. Location Lubbock, Texas. \$4,000. Call Joe 928-775-5000. (P06)

#### **PORTABLE RESTROOM TRAILERS**

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

WANTED: Used Wells Cargo UltraLav and Comfort Elite restroom trailers. Call Jamie Hunter at Hoosier Portable Restrooms 317-439-9383.

#### PORTABLE RESTROOM **TRUCKS**



2012 Ford F550: 4x4, 58,000 miles, 750 waste/350 freshwater. Extended warranty up to 200,000 miles bumper to bumper. DC-10 water pump, Masport pump. Ledwell tank. \$47,000. Also have units and other route trucks available.

Clint 330-600-1912. OH



1994 International: 466 engine, auto, 1,000 septic, 250 fresh, extra fresh tank, toilet rack on back. Runs good. \$11,000

Steve 618-922-2338. IL



**Complete Portable Toilet service** truck mount units (turn-key), mounted on your truck or ours. Tool boxes, dual work stations, dc10 washdown pump, reversible vacuum pump, hose reel, set up complete, toilet racks available. 1100 waste/400 fresh: \$19.000. 1700 waste/600 fresh: \$20,500. Anv custom options or sizes available!

> **TexLa Services** 936-641-3938 www.texlaservices.com PO6

Three (3) portable restroom service trucks: 2004 International 4300 - air brakes. 1,100/400 Abernethy, 16,828 hours, \$35,000. **2006 International 4300** - air brakes, 1,100/400 Abernethy, 11,928 hours, \$37,500. 2009 Chevrolet Kodiak 5500 - polished aluminum Progress tank and wheels. All have two-unit carriers. Fleet-maintained with maintenance records. Route ready. Call or text 931-320-2004 before 6pm CST (P06)

2006 International 4600: 1.500/500 aluminum Progress tank. 232,000 miles. Asking \$38,000.419-303-3443 (P06)

2011 Isuzu NRR: Diesel, automatic with 2008 Progress aluminum tank, 350 water, 900 waste, Masport pump, 77,000 miles, \$39,000. Call 845-883-7880.

2003 Ford F450: Dual-wheel with 500 waste/300 fresh, vacuum from both sides of the truck, water tank with pressure. Needs oil ring and motor work. Asking \$5,000. If you would like to see picture please email bestseptic@gmail.com

Five (5) 2005 Ford F450 diesel pumper vacuum trucks for sale. 300 fresh and 650 waste. Mileage ranging from 223,677 to 283,867. Inquire for pricing. Please call us at 651-429-3781. (P06)

Clean 2008 Ford F450 diesel, auto., 4x4 chassis, flatbed. New aluminum vac tank -400 waste/200 water. New Conde vac pump. Call for more info. www.pumpertrucksales. com. Call JR. @ 720-253-8014, CO. (PBM)

2006 GMC: Duramax diesel. Allison auto. New aluminum tank 400 waste/200 water, Conde pump, Honda motor. www.pumpertrucksales.com. Call JR. @ 720-253-8014, (PBM)

2009 Ford F550: 4x4, diesel, auto, new aluminum tank 400 waste/200 water, new Conde vac pump. www.pumpertrucksales. com. Call JR. @ 720-253-8014, CO. (PBM)

2000 Int 4700 - \$17,500; 2002 Int 4300 -\$23,500; 2006 Int 4300 - \$39,500; Roll-off -\$23,500. Restrooms - \$150. 256-757-9900 or www.pbsos.com. (PBM)

#### **PORTABLE SHOWER TRAILERS**

For Sale: Two (2) 40-ft. shower containers. 14 shower heads per container, handicap accessible. Trailer and accessories included. For pictures go to www.candsshowers.com. 712-428-6143 or cell 712-880-1250. (P08)

#### **POSITIONS AVAILABLE**

On Site companies has multiple employment opportunities available for our current branches and future expansion branches for key Management, Operations, and Sales positions. Contact hr@onsiteco.com or call 651-429-3781. Check us out at www.onsiteco.com (P06)

Open positions at Johnson Environmental Services, South Florida location: Lift Station Technician Field Estimators/Supervisors (familiar with outside plumbing systems). E-mail resume with salary requirements to: alpanz@johnsones.com www.johnsones.com (P06)

PLACE YOUR AD ONLINE AT www.pumper.com - IT'S ALWAYS THERE TO MEET YOUR BUSY SCHEDULE

GapVax. Inc., a nationally recognized manufacturing business, is seeking a talented, highly motivated individual to fill a full-time Sales Position in the Midwest (lowa based preferred) region. GapVax is the leading manufacturer of industrial and municipal vacuum units and hydroexcavation units in the United States. We provide the most reliable, comprehensive, and efficient mobile vacuum units in the industrial and municipal markets. Specifications of the position are listed on our website, www.gapvax. com, click on the Now Hiring link in the left hand column. Send resumes to Lthomas@ gapvax.com or 575 Central Avenue, Johnstown, PA 15902. (CPMGBM)

#### **PUMPS-VACUUM**

Fruitland 500 vacuum pump for sale. 6 months old. Comes with Thermaflo & hydraulic motors. \$8,000 OBO. Contact 715-560-0609. (P06)

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)

#### **RENTAL EQUIPMENT**

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.vsirentalslic.com (PBM)

#### **SEPTIC TRUCKS**



1998 Peterbilt 357 Vac Truck: 370hp CAT C10 diesel engine, 8LL Eaton-Fuller manual transmission, air suspension, 385,000 miles. Features include: 1998 Battioni pump WPT 720 model, 4,000-gallon steel vacuum tank - replaced in 2008, Seelevel Annihilater gauge & a float gauge, 3" heated valve and rear 3" and 6" heated valves, 270' of 3" hose & a 6" dump hose, air conditioning, cruise control, 22.5" rear tires, 38.5" front tires, tri-axle, 60-gallon fuel capacity 60,000 lb. READY TO G0!

Contact Olson's Sewer Service 651-464-2082, MN PO



Turn-Key Vacuum Tank Units: 3,600-gallon, unit mounted on your truck or ours; \$20,000. 3,200-gallon truck units; 19,500. 2,500-gallon truck units; \$18,000. 1,500-gallon truck units; 16,000. Self-contained vacuum skids, 1,000-gallon; \$10,500. 2,500-gallon painted tanks ready to mount; \$13,000. PortaPotty trucks and any custom options or sizes available!

TexLa Services 936-641-3938 www.texlaservices.com

P06



Call 715-938-0119, WI PB



703-361-4517. VA

P07

1990 Mack RD690S: GVW 64,000, 4,000gallon steel tank. Runs great - Ready for work. \$24,900. 413-297-0803 (P07)

1999 International 2,500-gallon vacuum truck, original owner, 150k miles, rust-free, DT466, ready to work. Very reliable, clean title. \$29,500 OBO. Call for photos and details. 949-701-2687 or 949-307-0933 (P07)

1999 Sterling: Transway system, 3,600-gallon tank, hydraulic pump. 280,000 miles, needs TLC. Works good. As is \$18,000. Contact: 1671@comcast.net (P06)



**2006 Ford F350:** 1,200 gallons, Jurop pump. One owner. \$36,000. Also have several other trucks for sale from 1,000-6,500 gallons.

Jerry 918-381-9072, OK



1998 Mack RD688s: Transway 4,000-gallon carbon steel tank, rearopening door, 3 baffles, 4 sight glasses, 4" intake, 6" discharge, heated valves. Mack 12-speed extended range splitter. 350hp Mack engine. 2-stage jake brake, differential lock. Air-ride cab, spring suspension, double frame. 170,000 miles, 13,525 hours. Transway 1,045cfm pump. Tank dumps just like a dump truck with hydraulic piston. All maintenance done. Springs front and rear, rear frog legs, kingpins, sandblasted chassis and tank, primed and painted 5 years ago. Cab in great shape - no rust. Truck is 100%. Have all paperwork since 1998. We are getting a new truck. Asking \$65,000. Truck was \$198,000 new. Located in Boston, MA. Call or email for more info.

dustin@preventativeseptic.com
Dustin 978-473-4510. MA PBM

2006 Freightliner Business Class M2: C7 CAT, 245hp, 6-speed Eaton-Fuller manual transmission (brand new still under warranty) 225k miles, vehicle weight 33,000GVW. 2,500-gallon tank w/Jurop R260 vacuum pump. It's my daily work truck. It has been in a accident before, but it doesn't affect it. Clear blue title in hand, this truck is a GREAT truck ONLY selling to upgrade. Good tires, radio, comes with 200ft. 3" vacuum hose. Power converter mounted in cab. \$38,000. MUST SEE! Call/text for pictures. 713-992-0916

1990 International Eagle pump truck. Cummins 9-speed. 3,000-gallon tank. 3 axle. GOOD TRUCK! Runs excellent. \$27,500. Call Rocky. 209-295-7606 CA (P07)



574-848-4193, IN



**1989 Ford L8000:** 215 F Ford engine, Allison automatic MT653, 2,500 steel tank, tool boxes, Fruitland 360cfm pump. 175,360 miles, CD player, trailer hitch, electric brake controller. Spare pump included with sale. Call and ask for Tim H. for more info.

800-672-3402, NH

P06



**2012 Kenworth T300:** 325hp, Allison RDS3000 auto., 12k,21k, 3,000-gallon (200/2,800) aluminum tank, NVE 607 "Max", complete jetter package. Call for pricing.

866-720-4999 www.tankservicesinc.com P06

1999 Sterling: 64,000 GVRW, 18,000 front, 46,000 rear. Float tires on front (435/65R22.5) 4,200-gallon aluminum lift tank - full-open hydraulic rear door on tank. New Jurop R260 pump, Eaton-Fuller RoadRanger Rt/Rto 8 double-low transmission. High-pressure hydro-jetter system airoperated, heated valves, heavy-duty military hitch, trailer lights, jake break, CAT C12 engine (415hp), good heat and a/c, 287k miles. \$50,000. 678-873-7934 (P07)

2012 Ford F750: Diesel, Allison 6-speed automatic, Fruitland vacuum pump, 1,500-gallon tank. Like new. \$70,000. 910-709-1888 (P06)

#### **SEPTIC TRUCKS**



2008 Sterling LT9500: Mercedes 6cylinder (450hp), Fuller 8LL, Aluminum wheels, A/C, power locks & windows, 66k GVW. Dickirson Septic Truck, 3,000 gallon, steel tank. Masport PTO-drive pump. 149,278 miles. Stock# 8405 .... \$79,500

> 866-250-8260. PA www.Opdykes.com PRM



1997 Mack CH: Air-ride suspension. 8-speed transmission, 350 engine. 2005 3,600-gallon steel tank, skirts & pump, SS cabinets. Works everyday. Needs some work. Selling as is. ...... \$19,500

631-447-5252, NY



2005 Sterling: C-10 CAT, 253,000 miles, 10-speed transmission, a/c, cruise. New 2,500-gallon tank and Jurop R260 vacuum pump. New paint. Really clean truck! ..... \$44,000

740-820-5520. OH

P06

1995 Ford F800 pump truck for sale \$15,000 OBO. Runs great. Call Shelley. 860-614-1757 (P06)

1980s model vac truck, 2,100-gallon tank, Fruitland vacuum pump, International diesel. Runs but needs a little work. \$15.000. For more information or pictures call 337-230-1026.

1997 Mack 600 MR600 with used 5,000-gallon tank, 492k, Challenger 460 vacuum pump. Asking \$26,500. Hagerstown, IN. Call AdvSeptic & Sewer 765-489-5559 or e-mail advancedseptic@live.com (P06)



2006 International 8600 for sale: 10-speed, Cummins ISH, 4,000-gallon waste. 100-gallon fresh aux. tank with pressure jetter. Jurop 420 pump. Truck assembled Jan. 2014, tank, vacuum pump, jetter and seats all new. Rebuilt transmission and new turbo within last year. Good tires, aluminum hose trays and tool box. Paint excellent, like new. This is a great deal as my new truck has arrived and it needs to go. Great truck for Islands. Email for pictures. Call for more info. .....\$57,500

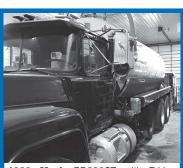
> Don 772-287-0651, FL drice@callcookes.com

P06



1999 International 4700: DT466E, 367,000 miles, 2,300-gallon T-Line tank, 2 tool boxes, 3" inlet, 4" outlet, Battioni pump, new transmission 2,000 miles ago. Truck is still in service daily. .....\$30,000

906-863-7778, MI



1988 Mack RD688ST with T-Line 4,200-gallon carbon tank built in 2007. Has a Masport HXL15 just rebuilt. Truck recently had all new brakes. ...\$27,500

920-979-7711, WI

2011 Kenworth T800 tri-axle: ISX 525 Cummins, 8LL transmission, HXL400 Masport vacuum pump, 5,000-gallon Pik Rite tank, heated valves. Lots of extras on truck. 232,000 miles. \$98,000. 2005 Mack Granite tri-axle: 460cu., 18-speed, 5,000-gallon Pik Rite tank, Jurop R460 vacuum pump, heated valves. Lots of extras on truck. 230,000 miles. \$85,000. 570-713-4870 (P06)



1998 Kenworth T800: 4,000-gallon tank, Utile LW825 pump. 189k miles, N14 w/jake, Hendrickson 4-bag air ride, 76,000 GVW. 8LL transmission. Two (2) 3" intakes, One (1) 6" discharge, all heated. Front sight tube, Two (2) 20" manways, rear work lights. .....\$70,000

Call Tom 860-558-0045, CT P06



1995 International Model 4900 septic truck: Remanufactured DT466 engine installed in 2011. 437,000 miles on the truck. 2,500-gallon Transway tank and pump. New TSI 500 pump installed in 2014. Used daily, serviced regularly and inspected every year. ..... \$28,000

Call Mark 603-493-1519, NH PBM



2011 International septic truck: 89,000 miles. 2,600-gallon aluminum tank with a Masport 350cfm air-cooled pump. 3,000psi jetter mounted on the truck and much more. Call for details. Price .....\$68,000

Billy 770-365-2566, GA

2003 International 4300: DT 466 new inframe overhaul; Allison auto., 136k miles, used 1,200-gallon steel vac tank, under CDL; PV3 vac pump. www.pumpertrucksales.com. Call JR. @ 720-253-8014, CO.

1987 Kenworth T600A: CW CAT 6-cylinder. Eaton-Fuller 15-speed. 8-bag A-R suspension. 3,365-gallon vacuum tank, Masport 75 pump. \$31,000. www.pumpertrucksales.com. Call JR. @ 720-253-8014, CO. (PBM)

2008 Ford F750: 260 Cummins, 7-speed. rear locking differential, New 2,500-gallon vac tank, new Jurup pump, www.pumpertrucksales.com. Call JR. @ 720-253-8014, (PBM)



2013 International 7600 WorkStar: Classy Truck of Year 2014. Lots of chrome. Truck only. Max Force 12.4L, 8LL transmission, Eagle interior. Only 35,000 miles and 2,300 hours. 20,000 front, 40,000 rears, 20,000 tag, good tires. Specs for tank are available from Imperial and we can provide them for you. NO FET TAX! Chassis only. ......\$120,000

Call 715-938-0119. WI

PBM



2011 Peterbilt 337 septic vacuum truck: Paccar PX-6, Allison 2500 RDS automatic transmission 5-speed configuration. Mileage: 65,625, GVW: 33,000lb, hydraulic brakes, air ride, a/c. New 2,200-gallon vac tank system - 1/4" tank shell and dome ends, one baffle, aluminum hose trays. Fruitland 500 LUFA RCF 500 (320cfm) vacuum pump direct-drive package. 3" final filter. Electrical specifications DOT approved LED lighting & wiring. Two LED work lights at the top rear of tank. Backup alarm. .....\$65,000

For more information please call: 877-336-0081, MB P06 alex@schellvacequipment.com www.schellvacequipment.com

1996 Western Star: Detroit Series 60. 18-speed transmission. Hendricks suspension, 3.365-gallon vacuum tank, Masport 400 pump, www.pumpertrucksales.com. Call JR. @ 720-253-8014, CO. (PBM)

1994 Peterbilt 377: Detroit Series 60, 10-speed transmission. 3,365-gallon vacuum tank, Masport HXL pump. www.pumpertrucksales.com, Call JR, @ 720-253-8014.

2000 Peterbilt: 300hp CAT, 9-speed, rear locking. Excellent condition. New 2,500-gallon vac tank. www.pumpertrucksales.com. Call JR. @ 720-253-8014, CO. (PBM)

Eight great older pump trucks - \$35.000 each. Big power, Jake brakes, 3,365-gallon vacuum tanks, Masport pumps. All makes & models. www.pumper-truck.com. Call JR @ 720-253-8014, CO. (PBM)

PLACE YOUR AD ONLINE AT www.pumper.com - IT'S ALWAYS THERE TO MEET YOUR BUSY SCHEDULE

2002 Freightliner FL70 with a Presvac 2,300 US gallon carbon-steel vacuum tank and Fruitland pump. (Stock# 4427C) www.VacuumSalesInc.com (888) VAC-UNIT (822-8648)

2004 GMC with Progress 1,200 gallon aluminum vacuum tank and Masport pump. (Stock# 1364V) www.VacuumSalesInc. com (888) VAC-UNIT (822-8648) (PBM)

#### 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 equip**ment available. For more info call Jack at 973-478-0893. Lodi, New Jersey. (PBM)

#### **SLIDE-IN UNITS**

1) 2008 Lely steel slide-in tank: 400 waste/200 water with a self-contained Conde vacuum pump and a Shurflo water pump. Asking \$6,500. 2) 600 waste/300 water steel slide-in tank. Battioni self-contained vacuum pump. \$6,500. Both units can be purchased for \$12,000. 254-534-5007 (P06)

Galvanized portable slide-in unit, lightly used. Truck or trailer mount. 450 gallons, 300 waste/150 water. Honda 5.5 electric start motor, pressure washer. \$5,900 OBO. Juddy's Septic Service. Call Terry 802-673-4698. (P06)

#### **SLUDGE APPLICATORS**



**802-477-2716, VT** POR



**1986 Field Gymmy Truck:** Blue, 427 automatic. 2,000-gallon stainless steel tank, newer Moro pump. Floater tires. Extra set of new tires. 1976 GMC parts truck included. Good shape. ... \$15,000

802-477-2716, VT



**2015 Freightliner M2106:** Cummins ISL 350, APS9060 bright-finish aluminum 1,000-gallon tank. Rear sump with 4" flange. The tank has full-length aluminum 34" sills, 20" pressure manhole on top and rear, 3" primary shut-off, and 4" rear inlet flange with riser pipe and S/S deflector. Defender 500 vacuum pump by Challenger. Raven Viper Pro.

**309-527-6455, IL** P07



Maximizer Septage Screening Machine: Removes the trash from the septage before you land apply. Works well. Stainless steel construction. New in 2004. Very good shape. \$10,000. Generator available to run machine in remote location - \$1,500.

802-477-2716, VT P06



CAT corporate special **CT660L 6x6** with chassis and electrical specifications by Linco-Precision. 58,000 lb. rear axles with 60" spread. Sludge system: 5,500-gallon pressure/vacuum tank, 82" x 19', with 5/16" walls and 2 baffles. All plumbing is TIG welded stainless steel. Raven Viper Pro.

**309-527-6455, IL** P07

#### **TANKS**

Vacuum Tanks - New: Sizes from 1,000-4,300 gallons. All complete! Delivery available. www.JEagleTanks.com. Contact Jerry: JEagleTanks@yahoo.com or 800-721-2774. (PBM)



**100 - 2011 Wichita 500 bbl.** (21,400 gallons) portable frac tanks. Epoxy lined. Delivery available.

Call 815-341-0375 P07 or email tsgeneva@hotmail.com

#### **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**<sup>™</sup> tested to 50,000 volts. **Top Poppers**<sup>™</sup> open manhole covers easily. Free catalog. **www.TandT tools.com.** Phone **800-521-6893.** (PBM)

#### **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-VACUUM/TANKER



**Imperial Vacuum Trailers:** In stock, 6000- and 6300-gallon aluminum single-compartment Imperial vacuum trailers.

Call Mike 800-558-2945 Ext. 328 PBM

2015 Acro Vacuum Trailer: Stainless steel 6,000 gallon, DOT certified double conical with air-ride suspension. Aluminum wheels all positions, full hose trays, OSHA walkways and railings. Vacuum pump option either hydraulic or self-contained. KLM Companies 617-909-9044 (PBM)

500-gallon vacuum trailer. Vibrator in floor. Tandem axle. 18" x 5' back gate opening. Hydraulic dump, Honda motor, electric start. Works GREAT, I upgraded to a bigger machine. Great starter/backup rig. \$6,000. Call Regan 325-372-7221 Serious inquiries only. (P06)

## TRUCKS - MISCELLANEOUS



952-469-1800, MN



734-722-8922, MI

P06



**2007 Stering L19500:** C13 engine, 407hp, with jake brake, 8LL, spring suspension, 4:56 ratio, 244" WB, 24.5" tires, 16,000 front and 46,000 rear, 297,962 miles, double frame, 80 bbl. Central Star vacuum tank.

262-652-7922, WI www.milesleasing.com

2004 Mack Granite: 427 with 13-speed.

Imperial 5,500-gallon tank with stainless hose rack, hoist, rear opening door and vibrator. NVE blower. \$89,000 or best offer. 920-434-2888. (P06)

P06

#### TRUCKS -**MISCELLANEOUS**



2001 Kenworth T-300 tanker: 300hp CAT, 6-speed, air brakes, 2,800-gallon steel non-code tank, 3" Roper pump. Loaded and clean, 190k miles. \$29,900.

412-400-5194, PA

P06

2001 Freightliner FL70: 2,500-gallon steel tank, full opening door, hydraulic dump tank. 3" suction valve 4" discharge valve. Two load baffles, 2" sight tube, dual side hose travs. 500-gallon water holding tank for the TSE2421 General pressure washer pump it runs 12qpm at 1,500rpm. The pump is a Challenger 866 500cfm vane pump. We are asking \$55,000. 317-945-2396. Ask for John.

2008 Peterbilt 367: Oilfield equipped, only 54.000 miles, \$115.000, ISX 550 Cummins diesel, 550 horsepower, 18-speed transmission, 20,000 lb, front, 46,000 lb, rears. 80-barrel water tank with Fruitland 500 pump. Call or email Del at 815-459-7751 or dayscrawford7@att.net for more information including pictures.

#### TV INSPECTION

2003 Ford Aries TV Inspection: Stk# 2168, V10 Triton gas engine. Honda motor powers rear unit. One (1) camera. Ken's Truck & Equipment: www.khtrucks.com 972-938-1905 or 214-632-5277 (PBM)

#### **VACUUM LOADERS**



2012 Peterbilt-Keith Huber Dominator: Excellent condition, fully loaded and ready for work. 500hp Cummins, 18-speed, air ride - 20 front, 46 rear. 133,000 miles, 5,080 engine hours, 950 pump hours. 730cfm vacuum pump, high-pressure jet system with 35gpm at 2,000psi. .....\$179,500

John 785-623-3925



2008 Sterling VacAll Model AJV1015: 10 cubic yards/1,500-gallon water. Roots vacuum pump 8x24 - 4,100cfm @ 16" HG. Mercedes MBE 4000 engine, Allison 6-speed automatic transmission, 20,000# front axle, 46,000# rear tandem. Maintenance records, mileage 29,814.5, 2,222.3 hours on engine, 143 hours on blower. Call for more information.

Biros Septic & Drain Cleaning, Inc. 570-889-3738. PA mike@biroseptic.com



Huge inventory of new and used industrial vacuum loaders. Visit www.Used VacuumTrucks.com for information.

Call 888-432-9070 or email P06 Info@UsedVacuumTrucks.com

2001 Gap Vax HG57 WET/DRY on Volvo WG64, 5,500 cfm, 27" Hibon blower, Cummins engine, chassis tank and bag house, in good condition, ready for work. KLM Companies 617-909-9044 (PBM)

2014 Freightliner M2 106 with Ledwell Vac Unit - 3,000-gallon/70-barrel vac unit with 2,600cfm. 44,180 miles/2,176 hours. Tandem axle with drop axle. \$244,000. Located in Williston, ND. Call 406-388-8332. (P07)

2001 Ford F550 VacMaster VNDS3000, 7.3 diesel, 94,000 miles, 6-speed, a/c, nice tires, 15' bed. John Deere engine 87 hrs., 120-gallon water tank. \$56,500. www.shumatetruckcenter.com for 38 photos or call 813-877-6638 (P06)

Refurbished 2002 Guzzler Classic: 27" blower, Sterling, CAT C-10 350hp. New brakes, tires and paint. Rebuilt transmission. Includes warranty. www.internationallinkllc.com 856-599-4838 FOB Ohio

FOR SALE: Guzzler and SuperSucker air movers: Wet vacs: Hydraulic submersible pumps: Air compressors: Sandblast systems; 5,500-gallon dump tank trailers. Call 502-551-0158 for more info. Cash buyer of used equipment. (P06)

2003 Volvo vacuum truck with GapVax VHD series combination machine. 1,500-gallon tank. \$165,000. 370hp Cummins, Allison 6-speed automatic transmission. 20.000# front axle. 40,000# rear tandem, a/c, radio, ABS brakes. Refurbished August 2014. Purchased new (one owner). Maintenance records. Call: 843-875-5674 Eadie's Construction or email: dawn@eadiesconstruction.com (P06)

1999 Sterling with a 3,200-gallon Cusco Master Vac high-dump unit. (Stock# 3378V) www.VacuumSalesInc.com (888) VAC-UNIT (822-8648)

#### WANTED

Need 75+ used portable toilets in good shape, Texas or surrounding states. PolyJohn or Satellite preferred. Vacuum truck, 26,000 GVW 1,100/400 steel or 1,500/500 aluminum; automatic transmission; 150,000 miles (Hino, Freightliner, International) Will consider buying tank 7 years old or newer if in Texas or surrounding states. Ray McEacher 512-825-1278 raymceachern@aol.com

Wanted to Buy: Vactor 2100s and late model Guzzlers. Cash. Phone 800-336-4369. (PBM)

Used dark-green PolyJohn Comfort Inn or XL handicap event units in good condition. Within 200 miles of 18078. SWI8754@ptd.net (P06)

#### WATERBLASTING

Gardner Denver T-375M: Bare Shaft pump. Gardner Denver T450M Bare Shaft pump NLB 20-200: 12 gpm @ 20,000 psi. Gardner Denver LC-1500: 390 gpm max, 15,000 psi max. NLB 36-200 6 gpm @ 36,000 psi. HT-150S 25 gpm max 10.000 psi max. Shell Side Machine, Wheatley 165: 30 gpm @ 10,000 psi. Wheatley 165: 17 gpm @ 20,000 psi. Wheatley 125 with aluminum bronze fluid end. Boatman Ind. 713-641-6006. View @ www.boatmanind.com. (PBM)



NLB Model 10150E-1 1/4 electric waterblaster pump - 150hp electric. Pump Model 10150A-12. Pump pressure 10,000psi. Pump flow 24gpm. Asking \$17,900. Other surplus NLB waterblasting units available - 10120, 8120, 10150D. Call for info & pricing.

734-722-8922. MI

P06

NLB 1012 waterblaster running at 10k psi, trailer mounted. In good operating condition. Also large amount of misc. accessories for sale. This blaster is ready to work and make money. Please call with any questions. 330-716-2004

I have a Jetstream 10175 waterblaster set at 10k psi for sale. It is trailer mounted. Runs great and is ready to work. I also have a large amount of blasting accessories for sale. Please call with your questions and needs. Rick 330-716-2004.

I have a NLB 10305 waterblaster that is in great shape and is ready to work. I also have a large amount of misc. water blasting accessories for sale. Please call for details. 330-716-2004

FOR SALE: Diesel water blasters; Jet rod truck; Jet rod trailers. Call 502-551-0158 for more info. Cash buyer of used equipment. (P06)

If you are using an

#### **800 NUMBER**

in your ad, be sure it can be used in all areas nationwide.



## TANK SERVICES, INC

#### Call Today For Savings

Professionals in the Vacuum Tank & Trailer Industry Contact: Jerry Blake, Toll Free: 866.720.4999 or: Amanda: 281.728.0714



Web site: www.tankservicesinc.com

**Amanda Hensarling** Baytown, TX amanda@tankservicesinc.com



**2016 MACK GRANITES AVAILABLE** 

8000 & 9000 Gallon Aluminum Tri-Axle Trailers

Air ride suspension (tri-axle), pump platform, bright finish, LED lights, Betts valves,



300HP, Allison auto, NVE 607 Pak, 2800 gal. alum tank. IN STOCK

4500 gallon stainless, hoist tank



**Self Contained Unit** 

600 gallon steel tank, 33.5 HP Kubota diesel engine (choice of pumps), 200 gallon poly tank, 6 gpm 3,000 psi jetter.



950 gallon stainless, carrier rack



Slide-In Units

500-1,000 gallons, 1 or 2 compartment; select a pump package & engine HP. Standard units "Always in Stock" all light weight aluminum, many available options.



**BANDLOCK** 

Reducers

800.721.7270









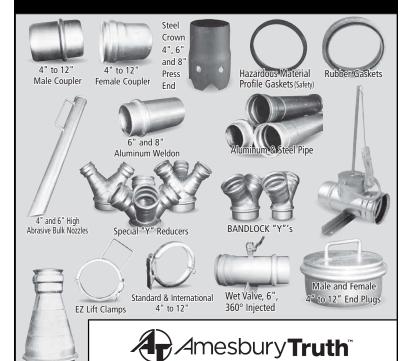


Need Equipment? Contact Us We Can Get It. 866.720.4999

(2) 5,000 gallon aluminum tanks IN STOCK

ready to mount out chassis or ours

### **SUPERIOR "QUICK" CONNECT VACUUM AND PRESSURE COUPLINGS**



Engineered Solutions. Trusted Results.

www.bandlockcouplers.com





## Pressure Washers, Replacement Engines, **Pumps, Parts & Accessories**



Hydraulic Pressure Washer -



Power Take-Off Pressure Washers









Hot Water Trailer Packages



26 GPM Pump

Portable Generator 6500 Watt





Powerful Generator 9000 Watt



Overhead Valve Recoil Engines



2" & 3" Water Pumps

### WaterCannon.com



### 1.800.333.WASH (9274)



Honda-Powered Trash Pumps



Honda-Powered Compressors Vanguard Hot Water Pressure Washers





Locking Safety Quick Connects



Pressure Washer Hoses





Custom Pump Assemblies



Mag Wheel Under Carriage Cleaner



3"-24" Stainless Steel Spinners



Industrial Trigger Gun Assemblies



**Under Carriage Cleaner** 



Car Wash Booms & Parts



Truck Wash Components

Clean Indoors with No Mess



**Duct & Chute Cleaning Spinners** 



3 Story Telescopic Wands





Air Recovery System Cleaner Versatile Hand Controlled Cleaning





Air Recovery Avoids Run Off



Air Recovery Works on Walls



Air Recovery Graffiti Removal



Cleans on Walls and Floors



Surface Cleaners Save Time



# PRES/AG

DESIGNED AND BUILT FOR PERFORMANCE



#### Powervac 3800

- > DOT 407/412 Code Tank > 3800 CFM Blower - > 27" HG
- > Wet & Dry Loading > Waste Tank: 17 Cubic Yard SS 316 > Wash Down Pump: 5 GPM @ 2000 PSI, 100 USG Water Tank

#### Powervac Mini w/ Hydro-X Package

- > DOT 407/412 Code Tank > 1650 CFM Blower > 27" HG
- > Waste Tank: 4200 US Gallon SS 316 > Hydro-X Package: 5 GPM @ 3500 PSI, 440000 BTU Burner, 700 US Gallon Water Tank SS 304





#### Dump Trailer / Tractor Combo Stainless Steel 316

- > DOT 407/412 Code Tank > 900 CFM Blower > 27" HG
- > 7800 US Gallon Tank
- > Axle Spacing & Tank Size Configured To Your State Regulations

Work with us ... We listen!

**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