

LIQUID RECYCLING

used oil | parts cleaning | anti-freeze | filters & absorbents | wastewater | chemicals

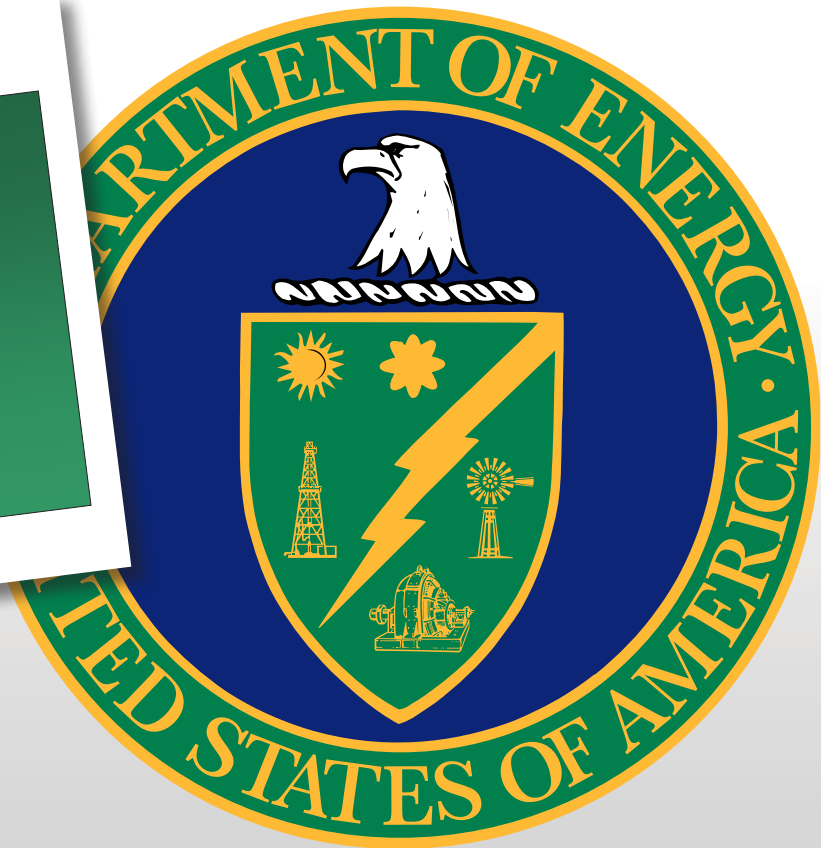
US Department of Energy Releases Used Oil Report to Congress

See page 10



Used Oil Management and Beneficial Reuse Options to Address Section 1: Energy Savings from Lubricating Oil Public Law 115-345

Report to Congress
December 2020



Ask Jack: EPA Guidance for PFAS Destruction and Disposal14

Classic Used Oil Generator: 1970 Ford Bronco16

Member Spotlight: Petromax Ltd18

Implementing Best Practices: Job Type Hazard Assessments22





The liquid recycling industry
needs a solid insurance partner.

Our experts have been insuring risk in the liquid recycling industry before it was even considered an industry. From transportation and site pollution to product contamination and pollution, Ironshore can protect you from the full spectrum of risk. For more information go to ironshore.com.



IRONSHORE[™]
A Liberty Mutual Company

Federal Used Oil Strategy

On August 12, 1986, President Ronald Reagan famously said, “The nine most terrifying words in the English language are: I’m from the government and I’m here to help.”

This comment from history shows that when the government steps in to “help” it can create anxiety for those receiving the “help”.

In 2018, NORA members learned that the government passed legislation to “help” by having the US Department of Energy prepare and submit to Congress a coordinated Federal strategy to increase the beneficial reuse of used lubricating oil.

This certainly caught the attention of NORA and its members.

NORA: Primary Stakeholder

NORA positioned itself to be the primary association stakeholder on this project as we are the only association that represents every facet of the used oil industry.

The association hosted a meeting in March 2019 in Louisiana where all members were able to provide input on NORA’s strategy. NORA’s Board of Directors approved a strategy of supporting the DOE and promoting all forms of responsible recycling and maximizing collection. Jack Waggener and I represented all NORA members at each DOE meeting.

Impressions

Having fully participated in the 2006 and the 2020 DOE reports, it is my opinion that the 2020 process had a much broader and healthier stakeholder engagement.

Overall, the 2020 report is a stronger product than the 2006 version. Their report includes important updates on data points, however the lack of significant primary research is still something needed by the industry. Most notably, the report includes 18 specific recommendations to improve collections and re-use of used oil. Many of the recommendations came directly from NORA input during the process.

I encourage all members to at least skim the report. There is an article in this magazine and members can access a webinar about it on the NORA website. If you have additional questions or comments, please contact me.

What’s Next

Following the 2006 DOE Used Oil Report, not much action happened at the Federal level regarding the recommendations in that.

The last sentence of the Executive Summary of the 2020 DOE Used Oil Report states, “Upon further guidance from Congress, DOE would have a coordinating role, as appropriate, in implementing the recommended actions.” DOE states that further action will require Congress to provide direction and resources for Federal agencies to work together on implementing the recommended action plan.

To that end, I will be setting up meetings in 2021 with the appropriate Congressional offices to promote the action items from the new “Federal Strategy on Used Oil Management and Beneficial Reuse Options” that would be most beneficial to NORA members. ■

Parker’s Point	3
New NORA Members.....	4
Industry Calendar.....	4
New 2021 NORA Board Members.....	5
Industry News.....	6
US Department of Energy Releases Used Oil Report to Congress	10
Ask Jack: EPA Guidance for PFAS Destruction and Disposal.....	14
Classic Used Oil Generator: 1970 Ford Bronco.....	16
Member Spotlight: Petromax Ltd.....	18
Implementing Best Practices: Job Type Hazard Assessments.....	22
Supplier/Vendor Directory	36

2020 Conference Wrap Up

2020 Conference Wrap Up.....	24
2020 Conference Sponsors	32

ADVERTISERS

ASI Environmental	4
Avista Oil	49
ChemTreat.....	37
Dexsil Corporation.....	Back Cover
Dober Chemical Corporation	5
Dolphin Centrifuge.....	39
Environmental Recovery Corporation	38
Gen III Oil Corporation.....	21
GFL Environmental Inc.	7
Haz~Mat Environmental Services.....	9
Heritage - Crystal Clean, LLC.....	40
Hydrodec of North America, LLC.....	48
Imperial Industries Inc.	41
Innovative Fluids.....	40
Ironshore Environmental.....	2
ORG CHEM Group, LLC.....	42
Par-Kan Company	50
PESCO - Pragmatic Environmental Solutions Company.....	43
Radian Chemicals LLC.....	44
Summit Environmental Technologies	8
Titan Logix Corp	12
Valcor Environmental Services, LLC	45
Vertex Energy Inc.	15
WC Leasing	46
World Oil Corp	47
XL Insurance, Division of AXA	51

Liquid Recycling is published by NORA, An Association of Responsible Recyclers. Copyright, 2021 NORA. The opinions expressed in the articles are those of the author of the articles and not necessarily the publisher. While every attempt has been made to assure that the information in the magazine is accurate, the publisher assumes no responsibility for any omissions or errors, nor for the application of any advice or suggestions in any particular situation. Due to space limitations, all items published are subject to abridgment. Unsolicited items will not be returned.

NORA, 7250 Heritage Village Plaza, Suite 201, Gainesville, VA 20155
P: 703-753-4277 | info@noranews.org | www.noranews.org

WELCOME TO NORA'S NEWEST MEMBERS

Know someone who should be a NORA member? Contact Brittanee Gasser at marketing@noranews.org or 703-753-4277 and if they join you get a \$100 Amazon Gift Card.

BN Refining, LLC

Phoenix, Arizona
(602) 268-2600

Boomer Environmental LLC

Oklahoma City, Oklahoma
(877) 670-9729

Clean Water Environmental

Dayton, Ohio
(937) 268-6501

Gallagher

Chicago, Illinois
(630) 773-3800

Marpac Corporation

Grove City, Pennsylvania
(724) 458-5334

Sensoneo

Scottsdale, Arizona
(602) 321-5613

Spartan Tank and Trailer

Spartanburg, South Carolina
(864)- 06-6310

Texas Molecular

Deer Park, Texas
(281) 930-2500

TIPCO Technologies

Owings Mills, Maryland
(410) 984-7517

INDUSTRY CALENDAR

(meeting dates are tentative and subject to change)

2021

NORA EH&S Forum & Mid-Year Meeting

June 9-11, 2021
Nashville, Tennessee

NORA Annual Conference & Trade Show

November 10-13, 2021
Florida

**CARING FOR THE ENVIRONMENT
WITH THE UTMOST INTEGRITY.**



- ▶ Used Oil Processing
- ▶ UST/AST Fluid Processing
- ▶ Tank & Sump Cleaning
- ▶ Hydrocarbon Recovery & Processing
- ▶ Sumps & Separator Fluid/Sludge Removal
- ▶ 24 hour Vacuum Service & Transportation
- ▶ In Plant Vacuum Services, Fluids and Storage
- ▶ Monitoring Wells, UST & AST Tank Maintenance
- ▶ Metal working fluids and Oily Water Treatment
- ▶ Detailed Documentation/Compliance with State and Federal Regulations

ASI CORPORATE HEADQUARTERS (903-831-7280)
4115 N. Kings Hwy Ste 112, Texarkana, TX 75501

TEXARKANA FACILITY (903-832-4790)
7600 Alumax Dr., Texarkana, TX 75501

DALLAS/FORT WORTH FACILITY (972-225-6500)
1013 I-45 S, Hutchins, TX 75141

LITTLE ROCK FACILITY (501-490-2468)
405 W. Dixon Rd, Little Rock, AR 72206

Welcome to the newest 2021 NORA Board Members



Don Brockman
SpecOil LLC



Ellie Bruce
Heritage-Crystal
Clean



Craig Patrick
Buck's Oil
Company

For a complete listing of the NORA Board of Directors, visit www.noranews.org/BOD

DOBER CHEMISTRY AND TECHNOLOGY

We deliver inspired innovative chemistry solutions to solve our customers' most challenging problems.

SuperoSyrup
COOLANT ADDITIVES



Our syrups feature high-performance and cost-effective chemistries for antifreeze and engine coolant applications. Super Syrups are highly concentrated, stable, single-syrup formulations that enable easy and consistent blending.

GreenFloc. NATURAL COAGULANTS
HaloKlear. NATURAL FLOCCULANTS



Break any emulsion - Oil, Synthetic coolants, lubricants, and cutting fluids. Our natural coagulants will break your tough-to-treat emulsions, while lowering overall treatment costs and increasing treatment process efficiency.

Smartrelease
Technology



Solid-feed total water treatment systems for cooling towers are simply better than traditional solutions. Eliminate hazardous liquid chemistry and go solid with easy to install, safe to handle, and reliable applications.

11230 Katherine's Crossing | Woodridge, IL 60517

Toll Free | 1-800-323-4983 or Local | 1-630-410-7300

www.dober.com

Industry News

MORE INFORMATION ABOUT THESE NEWS ITEMS IS AVAILABLE AT WWW.NORANEWS.ORG/NEWS.
SEND ANY INDUSTRY NEWS UPDATES TO COMMUNICATIONS@NORANEWS.ORG.

Gen III Signs LOI with Super Major

NORA member Gen III Oil Corporation announced the Company has signed a Letter of Intent with a super major international energy company for the offtake of all of Gen III's future production of Group II+ and Group III base oils from a proposed 5,600 bpd marine terminal facility in or near Houston, Texas.



Rational Resource: New Name & New Strategy

NORA Member, Rational Resource, formerly Rational Energies, has rebranded the company to better reflect its product offering and business model. Based in Minnesota, Rational Energies was formed in 2007 to convert plastic waste into its petrochemical constituents. With falling global oil prices, the company evolved its technology and business model to focus exclusively on converting used motor oil (UMO) into base oils, used in the manufacture of industrial lubricants.

New IRS Guidance on PPP Deduction

The IRS released new guidance clarifying the tax treatment of certain expenses paid by taxpayers who have received a loan under the Paycheck Protection Program (PPP). This new guidance amplifies a prior IRS notice on this subject that has been the topic of much discussion and legislative effort to reverse the IRS' position.

Vesco Oil Corporation Names Lilly Epstein Stotland CEO

Lilly Epstein Stotland has been named CEO of NORA member Vesco Oil Corporation. Vesco Oil is one of the largest distributors of branded automotive and industrial lubricants in the United States, and a leading recycler of used oil and antifreeze. She joined the family-owned company in 2004, and previously served as General Manager before she was appointed to her current role as President in 2017.

Technology to Solve Problems in Commercial Auto Claims

Determining liability in auto accidents is full of challenges. Through their partnership with Xtract, a provider of motor claims analytical software, NORA member, AXA XL, has developed a method to leverage data and technology to produce more streamlined claims management and overall better outcomes.

FMCSA Eyes Autonomous Trucks

As the race to build autonomous trucks gathers pace, U.S. regulators are seeking to set some safety rules for such vehicles. In a notice published in the Federal Register on Tuesday, the Federal Motor Carrier Safety Administration (FMCSA) is calling for public comments on a survey on the subject.

EPA Publishes PFAS Wastewater Recommendations

Recently, the EPA issued a memorandum detailing an interim National Pollutant Discharge Elimination System (NPDES) permitting strategy for addressing per- and polyfluoroalkyl substances (PFAS) in wastewater and stormwater permits.

FMCSA Drug Clearinghouse Records 46,000 Violations in First 10 Months

Nearly 46,000 driver drug-related violations have been recorded in the federal Drug and Alcohol Clearinghouse during its first 10 months of operation. Only about 4,400 drivers have completed their return-to-duty requirements. The leading number of drug test failures — 24,000 — was for marijuana.

Used Oil Recycling. Refined.



Proudly and responsibly collecting over 52 million gallons (**197 million litres**) of used oil across North America every year.

Visit [gflenv.com/motor-oil](https://www.gflenv.com/motor-oil) for more information.

Green Today. Green For Life. | **1.866.579.6900**



Industry News

MORE INFORMATION ABOUT THESE NEWS ITEMS IS AVAILABLE AT WWW.NORANEWS.ORG/NEWS.
SEND ANY INDUSTRY NEWS UPDATES TO COMMUNICATIONS@NORANEWS.ORG.

EPA Releases Interim PFAS Guidance - Seeks Comments

The EPA recently released new interim guidance on destroying and disposing of certain PFAS and PFAS-containing materials for public comment. Specifically, the new interim guidance outlines the current state of the science on techniques and treatments that may be used to destroy or dispose of PFAS and PFAS-containing materials from non-consumer products, including aqueous film-forming foam for firefighting. See page 14 for details.

Liquid Environmental Solutions (LES) Acquires Green Arrow Environmental Services (Green Arrow)

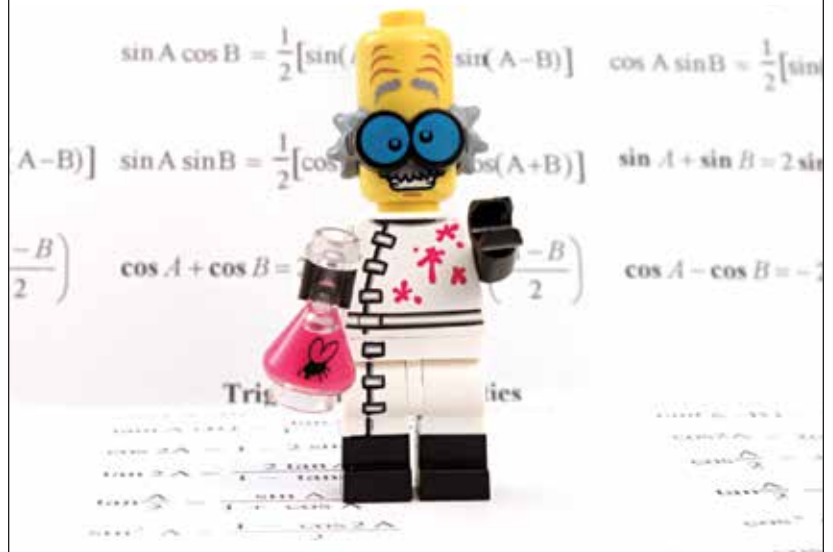
NORA member, Liquid Environmental Solutions, announces that the company has acquired the assets of Green Arrow – a leading provider of grease trap and septic services in the Phoenix, AZ area. Terms of the transaction were not disclosed. Green Arrow, based in Mesa, AZ, adds an extensive network of non-hazardous wastewater customers to the existing LES operation in the Phoenix, AZ area. These customers own grease traps/interceptors and septic systems that must be serviced regularly to prevent overflows, and to protect the public wastewater collection system.

Liquid Environmental Solutions (LES) Acquires Rite-Way Industrial Service, Inc. (Rite-Way)

NORA member, Liquid Environmental Solutions, announces that the company has acquired the assets of Rite-Way – a leading provider of industrial and environmental cleaning, waste hauling and remediation services in the Columbus, OH area. Jerry Sheridan, Chief Executive Officer for LES, commented: “I’m

very pleased to welcome the Rite-Way team and their loyal customers to LES. We look forward to working closely with them on expanding our national footprint, and on delivering the highest-level of customer service.” ■

When Choosing Your Lab...



Don't Play Around!



Contact: Larry Pacheco 877 299 0563 • Michael Pacheco 615 720 7568



GLYCOL RECYCLING EQUIPMENT & SERVICES

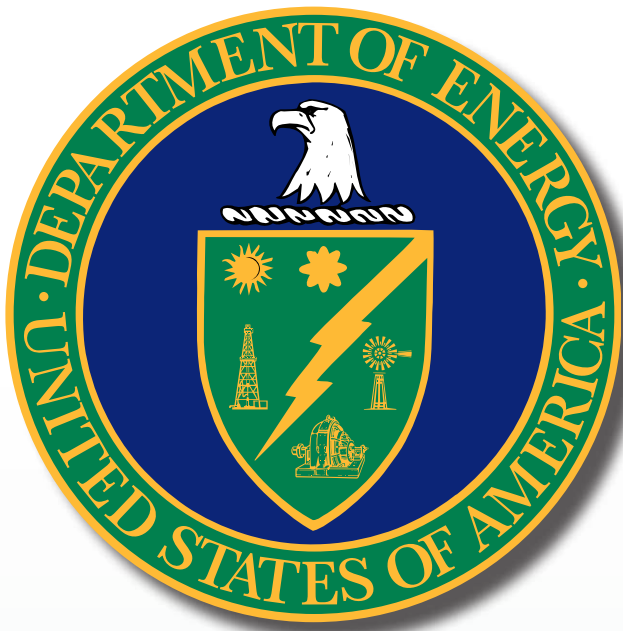
HAZ-MAT's Flash Fractional Vacuum Distillation systems are specifically designed to separate and purify glycol(s) from spent antifreeze and industrial waste streams, in accordance to ASTM specifications. Recovered glycol can be remarketed in concentrate form or blended as "ready to use" products. Single and double vessel systems can be used in various combinations to meet throughput requirements. Each system is pre-assembled and skid mounted for ease of shipment and field installation by our experienced technicians. Our proprietary software automates operation, allows operator control via input screen and provides remote monitoring for training or trouble shooting.



For more information contact Bill Dempsey at [402-297-2643](tel:402-297-2643) or email bill@hazmatnc.com.

HAZ-MAT ENVIRONMENTAL SERVICES, 221 DALTON AVENUE, CHARLOTTE, NC 28237

Neil Danziger, Owner • Office: 704-332-5600



US Department of Energy Used Oil Report Submitted to Congress

By Scott D. Parker, NORA Executive Director

On December 22, 2020, NORA was notified that the US Department of Energy (DOE) report “Used Oil Management and Beneficial Reuse Report to Congress” had been published. The 188-page report was delivered, pursuant to statutory requirements to 16 Members of Congress with various jurisdiction on the subject matter.

The report came nearly two years after Congress approved Public Law 115-345 that directed DOE to produce the report. DOE consulted with Federal, State and local agencies and affected industry and stakeholder groups. NORA served as a primary stakeholder as an association is the only group that represents the interests of all sectors of the industry and participated in all stakeholder meetings.

Objectives of the Report

Congress’ legislation to DOE directed the Department to:

- Update data that was used in preparing the 2006 report,
- Prepare and submit to Congress a coordinated Federal strategy to increase the beneficial reuse of used lubricating oil that is consistent with national policy,
- The strategy submitted was to address measures needed to:
 - o increase the responsible collection of used oil,
 - o disseminate public information concerning sustainable reuse options for used oil, and
 - o promote sustainable reuse of used oil by Federal agencies, recipients of Federal grant funds, entities contracting with the Federal Government and the general public.

Updated Data

Since 1974, the US Federal Government has issued four significant reports related to used oil. Each report has noted the lack of data needed to properly analyze and recommend strategies for the industry (See “The More Things Change” on page 11).

For the 2020 DOE report, the department has made significant improvements in updating the data from the 2006 DOE Report. However, little of the data in the report is primary. Instead, the report does a significant job in combining data from various sources into a single report. There is a significant amount of data in the report that NORA members should review.

For those that have been the industry for the last 15+ years, much of the data in the report will be intuitive. Frankly, some of the data in the report does not appear accurate or is overstated. The report is a product of combined data sources, most of which are based on estimates, extrapolation and limited data sets. Still, the report does have the most complete and updated data available.

According to the report, the total US lubricant production in the US has held steady over the past decade at about 2.5 billion gallons. Lubricant loss-in-use are estimated to be 44%, or about 1.1 billion gallons – however the report states that is considered a rough estimate. That leaves about 1.4 billion gallons available for collection.

Estimates of Key Elements of Total US Used Oil Process Flow
(million gallons)

Metric	2008	2018
Total Lubricants	2,516	2,469
Loss-In-Use	1,094	1,091
Used Oil Generated (auto)	1,020	972
Used Oil Generated (industrial)	402	406
Used Oil Generated (total)	1,422	1,378
Used Oil Collected	913	949
Re-refining (base oil)	123	294
Re-refining (VGO, MDO, etc.)	94	196
Recycled Fuel Oil, blended into HSFO, exported	696	459
Accounted for at Source (space heaters, recycled on-site, etc.)	509	429

Based on Kline & Company data provided to DOE.

According to data provided by the space heater industry, between 80 – 120 million gallons is burned in space heaters by generators.

The report estimates that 309 - 349 million gallons of used oil remains unaccounted for but notes, “the accuracy of these estimates is problematic due to the lack of reliable data”. The report goes on to state, “it is clear that there is significant potential for improving overall efficiency of used oil collection”. *Continued on page 12*

The More Things Change...

The 2020 DOE Used Oil Report is the fourth major used oil report from the Federal government in the last 46 years. Each report has identified the lack of industry specific data as a significant hindrance. This creates obstacles in properly analyzing the industry, developing strategies and measuring success of the strategies.



1974 EPA Used Oil Report

“Insufficient information is available to accurately estimate the total quantities of waste oil generated, available for recycle or disposed of improperly.”

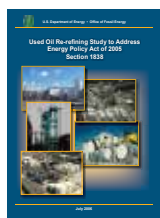


1995 DOE Used Oil Report

“Estimates of domestic waste oil generation are based on methodologies developed in the 1970s and 1980s. Although the 1991 data from the Clayton study have been adopted for this study, the accuracy of these estimates has been questioned, even by their originator.”

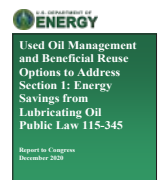
2006 DOE Used Oil Report

Estimates of Oil Volume Actually Recovered based on 1995-1996 studies. “Conduct a thorough and comprehensive update of the used oil industry major flows to validate the key assumptions.”



2020 DOE Used Oil Report

“Accurate analysis of the used oil marketplace in the United States is hindered by a lack of detailed data regarding the volumes of oil lost in use, collected, uncollected, improperly disposed of, burned and processed.”



Life Cycle Analysis

Eight new used oil life cycle analysis (LCA) studies about used oil were done since the 2006 report. DOE determined that four of the reports about used oil dispositions were relevant to the US marketplace.

The report provides a detailed analysis of each LCA. The DOE suggests that a formal harmonization effort is needed to “reduce the uncertainty observed across the LCAs.” In addition, DOE promotes the concept of a new LCA that would analyze a “more holistic study of the US system”. The earlier LCAs, according to DOE, have either focused only on California or focused on a limited set of criteria.

2020 Federal Used Oil Strategy



The 2020 DOE Report includes 18 specific strategies grouped into 5 areas (see page 13 for a summary). The concepts in the strategies need further development and specifics. The views of DOE related to these strategies do not necessarily reflect those of NORA.

While the strategies in the 2020 DOE report are more thorough than the 2006 DOE report, each item is described broadly. Some of the strategies are simple and others may be described as aspirational. DOE is seeking further guidance and resources from Congress to enable Federal agencies to work together on recommended actions.

What's Next

NORA is in the process of informing members about proposed strategies – that includes a webinar on the association website, discussions during the Winter Meeting and direct conversations.

NORA is seeking input from all members. Any member may contact me at sparker@noranews.org or 703-753-4277 to ask questions and provide input. Once that process is complete, the NORA Board of Directors will review the input and approve an action plan for the association.

At that point, I will set up meetings with the appropriate Congressional offices to promote the action items from the new “Federal Strategy on Used Oil Management and Beneficial Reuse Options” that would be most beneficial to NORA members.

TITAN LOGIX

Data that works



Titan TD Series

The most reliable mobile gauging system in the industry.

- **Guided Wave Radar Technology**
 - No moving parts, maintenance free
- **Eliminates Spills**
 - FailSafe overfill system
- **Smart Trucking Systems**
 - Connection to existing systems (Cloud / API integration)
- **Minimal Service Fees**
 - Up to 7 years warranty



www.titanlogix.com
sales@titanlogix.com
1-877-462-4085

NORA's Executive Summary of the 2020 DOE Federal Strategy on Used Oil Management & Beneficial Reuse Options

The following is a summary of the 18 point Federal Strategy on Used Oil Management & Beneficial Reuse Options that the DOE submitted to Congress. The views of DOE related to these strategies do not necessarily reflect those of NORA.

1. Implementation Plan

- 1.1. Pending guidance and resources from Congress, designate a lead agency and project manager to implement recommended actions.

2. Information Exchange & Outreach Recommendations

- 2.1. Establish a broad-based Stakeholder Advisory Group to gather/evaluate information related to used oil collection and reuse, address unresolved issues in the report and develop beneficial utilization of used oil strategies.
- 2.2. Working with relevant agencies, refresh Federal webpages related to used oil recycling and regulations.
- 2.3. Investigate ways to inform DIY oil changers of used oil recycling locations via a centralized website.
- 2.4. Based on the "best practices" data from States, investigate ways to increase used oil in lower population density areas.

3. Data Collection & Research Recommendations

- 3.1. Carry out research and data collection to better quantify estimates of: (1) oil losses in use, (2) used oil generated and collected, (3) used oil burned onsite, (4) used oil burned as used oil, and (5) used oil processed to RFO or blended into HSFO or exported as used oil.
- 3.2. Using National Laboratory resources, research effort to develop an inexpensive quick test kit for testing used oil for the presence of PCBs.
- 3.3. Compile State level data on used oil collection and disposition and develop "best practices" on how to encourage used oil collection through State policies.
- 3.4. Evaluate foreign used oil collection programs and identify "best practices" and insights for U.S. policies.

4. Data Analysis Recommendations

- 4.1. Utilizing National Laboratory resources, carry out a comprehensive life cycle analysis that quantifies the relative energy and environmental costs of various used oil dispositions.
- 4.2. Analyze used oil recycling programs and dispositions to determine where efforts to increase collections should be focused.
- 4.3. Evaluate States with tax incentives to buy space heaters to confirm if those programs are aligned with State objectives.
- 4.4. Evaluate the economic and security risk of a sudden cut off in Group III lubricant imports and the likely responses by crude oil refining and used oil re-refining industries.

5. Policy Development Recommendations

- 5.1. Consider eliminating or reducing notices of violation and allow industry to manage PCB-contaminated used oil in "as-found" condition, including a more equitable approach to assigning liability.
- 5.2. Review current government purchasing preferences for bio-based lubricants and lubricants re-refined from used oil and evaluate if bio-based lubricants in the used oil collection stream contaminates the feedstock.
- 5.3. Evaluate the costs and benefits of tax incentives that encourage the re-refining of used motor oil.
- 5.4. Consider options for providing grant funding or other incentives for use of oils refined from used motor oils.
- 5.5. Consider Federal options for supporting enhanced voluntary compliance auditing for used oil processors and re-refiners.

EPA Releases Interim Guidance for PFAS Destruction and Disposal

By Jack Waggener, P.E., AECOM and NORA Senior Consultant



Jack Waggener

EPA issued for public comment on December 18, 2020 the interim guidance on disposal and destruction methods for per- and polyfluoroalkyl substances (PFAS) that outlines currently available technologies but declines at this time to endorse or dismiss any while noting uncertainties and knowledge gaps that need to be addressed. The 107 page document examines only three disposal/destruction technologies: thermal treatment, landfilling and underground injection. It discusses the degree of uncertainty for these methods. The National Defense Authorization Act of 2020 directed EPA to develop this guidance.

Over the past few years, NORA and the members have been following with great interest the emerging PFAS chemicals of concern and how they might impact positively and negatively their recycling and centralized waste treatment operations. This document represents another setup by EPA to identify alternative treatment options and needed research.

EPA acknowledges a lack of data. “Performance and testing data -- including data on destruction and removal of PFAS in hazardous waste combustors and associated pollution controls, and long-term performance data for landfills and deep well injection -- are insufficient to support more specific guidance at this time,” the document says.

EPA adds that it “intends to fill gaps in knowledge associated with potential releases from these destruction and disposal methods

before issuing further guidance.”

The guidance does not endorse any particular technologies although it does suggest disposal/destruction options, ordering them in terms of lower uncertainty to higher uncertainty, suggesting interim storage of 2-5 years if immediate destruction of the PFAS materials is not imperative. The guidance also notes that it does not set what concentrations of PFAS in waste or other materials would necessitate destruction or disposal.

It lists interim storage, permitted deep well injection for liquid-phase waste streams only, permitted hazardous waste landfills and solid waste landfills with composite liners and leachate collection and treatment systems in that order as among the technologies with lower uncertainty. EPA says that in order to reduce uncertainties with managing the migration of PFAS into the environment, “interim storage may be considered for PFAS or PFAS-containing materials before” other options, such as hazardous waste combustors or other thermal treatment methods.

The document does not focus on technologies to treat waters with lower concentrations of PFAS. These are technologies such as the adsorption, activated carbon, specialized ion exchange resins, and other treatment options for wastewater that can be used in combination with other methods. All of these techniques are continuing to be researched by industry, academia, government entities, and NORA members that operate CWT’s. ■

PANORAMIC



Partnering to preserve the view since 2001

WE'RE TURNING TODAY'S FOCUS INTO TOMORROW'S ENERGY

At Vertex Energy, our focus is steadily on the horizon. Through key advancements in our supply networks, processes and technologies, we are increasingly able meet and even exceed the demands of today's market. At the same time we are simultaneously working to anticipate the needs of tomorrow by moving toward a low carbon future, while creating products that can help reduce our nation's dependence on foreign supply.

To learn how we're Producing Tomorrow's Energy, visit us at VertexEnergy.com.

VTNR
Nasdaq
LISTED



1970 Ford Bronco



Charles fixing to cross the Little Missouri River in Arkansas (Winter 1974)

Richard Norton is President of NORA member, ASI Environmental in Texarkana, Texas.

As the youngest of four brothers, Richard Norton was well-acquainted with all sorts of hand-me-downs. When the eldest brother approached driving age, the father bought a new 1968 Ford Bronco. The plan was for each teenage son to drive the vehicle until graduating from high school, after which it was to be passed down to the next brother. John was the oldest of the siblings, followed by Billy and Charles. “I was really looking forward to my turn with the Bronco,” Richard, the youngest brother recalls.

Unfortunately, weeks before Richard was to take possession, brother number three rolled the Bronco over twice. There were no injuries, but every part of the vehicle was torn, bent, or broken. As a testament to the ruggedness of the Bronco – following the wreck, it was pushed back onto its wheels and driven home. Sadly, Richard would miss his chance to inherit and drive the Bronco!

Years passed, then one day Charles spotted a Bronco for sale in Graham, Texas. He reported his find to Richard



New under the hood shot



The Bronco found in Graham, TX

and said the Bronco was in superior condition. Richard was very interested, especially when he discovered that Graham was only a 300 miles drive. Of course, those are Texas miles! Richard made the drive, examined the Bronco, and upon seeing the odometer had counted only 53,000 miles, quickly bought it and drove it home. After a thorough inspection, Richard decided a complete restoration was in order because he wanted it to look like the 1968 Bronco of his past.

The Bronco was disassembled and all the paint on every piece was removed. Fortunately, the Bronco had never been wrecked or attacked by rust! The full-length metal top was painted oxford white, an attractive contrast to the newly added holly green body color. The after-market headliner was removed to bring back the original look of

the interior. The wheels, hub caps, and red mile marker hubs were restored to give it that “right off the showroom” floor look. Following federal guidelines, reflector lights now adorn all four fenders. Power provided by the six-cylinder engine is transferred to the wheels through the three-speed manual transmission. The gear selector lever is mounted on the steering column.

When seated at the steering wheel, the rear view is seen by the mirror mounted on the outside of the driver’s door. The spare tire mounted on the outside of the tailgate does not hinder visibility. With a coil suspension in the front and leaf springs supporting the rear, Richard Norton happily reports that his Bronco “runs like a dream!”

It’s been a long time coming, but Richard finally has his turn at the wheel of a Bronco! ■

Petromax Ltd

By M. Diane McCormick

In honor of their mother's battle with Primary Progressive Aphasia, Adam's sister began the "For Their Thoughts Foundation (FTTF)" created after personally experiencing the reality and hardship dementia brings to an entire family. For more information, visit www.fortheirthoughts.org.

Consistency and compliance fuel growth of Petromax

As a civil engineer, Adam Hall didn't have a background in waste but in compliance. It's a strength now instilled into Petromax, the Pittsburgh-based firm Hall bought in 2011 and has guided into a trusted provider of waste oil and water collection and treatment.

Hall's transition out of civil engineering began with an opportunity to work with his father, Kermit Hall, a veteran environmental consultant with his own business. Hall's mother had been diagnosed with primary progressive aphasia, a form of dementia. Hall left his post with a central Pennsylvania civil engineering firm and headed to western Pennsylvania to help his father and grow the business.

But, Hall admits, working together can cause family ties to fray. When the owner of Petromax, a client of the Halls, announced he was closing the business, Hall offered to buy it, instead.

"At that point in my life, I was trying to find something to still work with my dad and at the same time, save our personal relationship," he says.





John Dewey

Hall found funding in his personal network “because the business model makes sense.” A friend on Wall Street invested in Petromax instead of buying a Manhattan apartment building. Hall’s mother-in-law and business partner Sean Porter also invested.

Porter remains on the team, applying 30 years in waste management and industrial cleaning to managing the firm’s trucking side. Plus, family bonds grew stronger, and Kermit Hall is a key operational player, providing consulting and training in spill prevention and best practices.

After the purchase, the Pennsylvania Department of Environmental Protection was “more than excited” to expedite permit approval because it meant sustaining an oil recycling business to manage the region’s environmental needs. Hall and his wife, who were expecting their first child, bought a house across the street to live in while they got the business back on its feet.

Suddenly, the process halted. The DEP official leading the review left the department. Until his replacement had time to review the files, the company couldn’t operate.

“We bought the company and sat here idle from June through October,” says Hall. Paying salaries drained his capital. DEP finally gave its blessing, but then came another blow. The company’s “ace in the hole” was John Dewey, a fabricator and processor from the original Petromax who knew every valve and pipe in the plant. A cancer diagnosis sent him into chemo and radiation. Just when he seemed to be recovering, he died from surgical complications.

“Sometimes, people do their best work with their backs to the wall,” Hall says now. “There wasn’t a manual that came with this place. There was a lot to figure out, but we did.”

By 2015, Petromax was recognized as the Pittsburgh area’s 12th-fastest growing company, and 2nd-fastest in the industrial sector. Since 2016, continuing growth has focused on diversifying trucking services, waste management services, and waste treatment capabilities.

The growing company runs two business lines. The disposal side works with waste management companies and generators

to properly handle and transport the waste materials collected from their clients. The other recovers oil and custom recycles it to meet the specifications of industrial-fuel customers.

There in the heart of shale country, one of the company’s biggest markets is the midstream natural gas sector, but other businesses rely on Petromax, too.

“We do work with airports, schools, ice rinks – the Zambonis and things like that,” says Hall. “You name it, we probably worked with it in some way, shape, or form.”

Initially, growth was propelled largely by responding to requests for service. In the last two years, the focus shifted to sales – seeking out potential customers and sealing the deal through Petromax’s reputation for excellence in compliance.

“That’s A-number one the most important,” says Hall. “We have a responsibility to treat waste properly and do what we say we’re going to do with it.”

Growth has also been propelled by Hall’s recognition that the company he acquired needed robust water-treatment capabilities. The savings added up, as Petromax adopted internal capabilities to treat waste water – in all its variants -- instead of sending it offsite.

“What we discharge is in compliance with the sewage authority,” says Hall. “That’s part of the reason we’ve been able to grow the way we have. We’re very responsible in how we handle people’s wastes. We treat it onsite versus sending it somewhere else, because then you don’t know what happens to it.”

Hall estimates that 80 percent of Petromax’s business is working directly with waste management companies that haul directly from their clients or broker the distribution of wastes. The end goal is serving as a destination for waste parceled out to facilities capable of managing specific non-hazardous waste materials.

The other 20 percent involves that trucking side, collecting

waste directly from such clients as oil-change facilities – the ones that took a direct hit from the 2020 pandemic. Other clients pumped the brakes that year as they waited for results of the presidential election. In the industrial marketplace, volumes fell about 20 or 30 percent, but Petromax covered the gap by increasing its collection, processing, and sales of recycled oil & fuel.

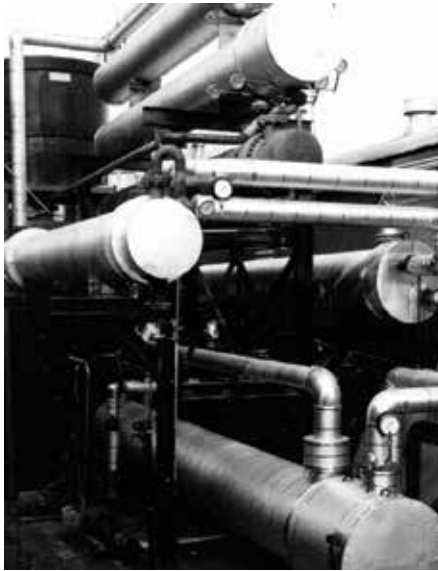
“This year wasn’t the best year ever, but it wasn’t the worst year,” says Hall. “We survived.”

Product consistency is a linchpin of Petromax operations.

“At the end of the day, price speaks a lot, but it’s also about quality and reputation,” Hall says. “We try not to deviate from our core competencies. We strive to provide a very uniform, consistent oil.”

Hall’s consulting background supports the company’s reporting and transparency efforts. He also offers the company’s expertise to help customers find reliable facilities for managing their full range of wastes. Even tips on producing and storing waste – perhaps suggesting that separating higher-value oils from the lesser products will produce more credits – is a value-add that doesn’t generate revenue but builds goodwill.

Petromax is a strong supporter of community efforts, such as children’s sports leagues. During the COVID pandemic, the



company donated to community outreach organizations and food fundraisers.

“All you have to do is send in a request, and we’ll sponsor it,” says Hall. “There’s a responsibility as a company to your employees. We pay our employees very well, so at the end of the week they have some money left over and enjoy life a little bit.”

For the future, Hall expects to continue diversifying Petromax’s waste solutions and filling any regional service gaps as other waste management companies change their business plans or close their doors in a shifting marketplace. While seizing opportunity has been a growth driver since Hall first acquired the company and he and his wife were painting walls, he has also learned to focus his business strategy on

the tactics and areas that produce results.

“You go down so many rabbit holes, and in hindsight, you realize it wasn’t that important,” he says. “At the beginning, you don’t know what’s important and what’s not important. Not that it’s ever wasted effort. You learn from everything, but as you get more experience, you know how to focus your time a little better.” ■

www.petromaxltd.com

301 Prestley Street

Carnegie, PA 15106

(412) 279-9040





No dinosaurs were harmed in the making of our base oils.

Gen III products don't come out of the ground, or end up there.

Gen III Oil Corporation recycles motor oil through an evolutionary re-refining process to produce high grade Group II+ and Group III base oils for use in API certified formulations.

Find out more about our products and our new refinery project at www.geniiiesg.com

Mark Redcliffe - Executive Vice President
mredcliffe@geniiiesg.com
(778) 668-5988



IMPLEMENTING BEST PRACTICES:

Job Type Hazard Assessments

“An investment in knowledge always pays the best interest.”

—Benjamin Franklin



Balancing environmental, health and safety (EHS) compliance with trying to maximize productivity and revenue generation is a constant challenge for NORA members. Companies of all sizes struggle with how to operate within everchanging regulations while staying in business in a hyper competitive market.

Many companies fail to integrate consistent EHS practices into their operations and as a result, often find themselves scrambling to comply with an agency request, customer RFP or even a plaintiff's demand. One very simple, yet extremely effective, practice that many companies fail to leverage is undertaking a Job Type Hazard Assessment ("JTHA").

A robust EHS management system should look at every job and identify the basic operational requirements, risk of noncompliance, the hazards facing employees and what training and PPE are required. This is more than checking a box, it is a position-by-position review to make sure every employee knows how to do the job right. The goal of a JTHA should be to set employee expectations for what it means to work in that job and provide a risk review that helps develop a narrative about each type of job in your company.

A JTHA is often created in conjunction with a PPE assessment, and should always involve direct feedback from the employees who have the job being assessed. Companies can identify tasks, set expectations and generally explain the operational side of the job in a more detailed and specific manner than a standard job description. Laying this out in a document, as part of an onboarding package, will also help demystify a job for a new employee. It is a great tool to give you confidence that you know how to onboard safety-ready employees.

The JTHA should also cover the risks associated with the job. It is already a basic OSHA requirement that each employer assess the risk of the workplace – a JTHA can help you demonstrate your compliance with this requirement. For example, by identifying the hazards and risks associated with operating certain equipment or visiting customer locations, a company can create a hazard awareness in its workforce. Identifying each of the steps the company has taken to mitigate those hazards, including specifically delineating what PPE each

job type needs, can go a long way to helping manage risk.

The final, critical step of the JTHA is to share it with your employees, particularly new hires. For existing workers, it can be a great way to level-set expectations, solicit valuable feedback and even manage change around introducing enhanced EHS practices and policies. A best practice would be to have all employees sign their JTHA. This provides a document showing that on day one, every employee is made aware what their job entails, what risks they may face, what training they will need and what PPE they are supposed to wear. This can also be an incredibly powerful thing to share with your insurance carrier to demonstrate your commitment to reducing risk and making your employees hazard aware.

A JTHA is a low-cost investment in both your employees' safety and the success of the business. Companies that develop clear and concise JTHA's have more consistent compliance, fewer surprises and significantly reduce their risk. Without organizational alignment, management visibility and an informed and educated workforce, a company can never fully achieve EHS excellence. A JTHA is simple practice that help makes this happen and it is something that any size company can implement to drive value directly to the bottom line. ■

Chip Duffie is the President and Founder of EHS Momentum, LLC, a full service EHS consulting and software firm that focuses on empowering small and mid-sized business to implement EHS management systems. Prior to founding EHS Momentum, Chip was Sr. Counsel in the Dallas, TX office of Clark Hill Strasburger where he was a member of the Environmental and Regulatory Team. Chip also served as Chief Compliance Officer for Safety-Kleen and then as SVP, Compliance for Clean Harbors.

2020 NORA CONFERENCE & TRADE SHOW WRAP-UP



**2020 NORA
CONFERENCE**

TUCSON, ARIZONA
NOVEMBER 11-14, 2020

The 2020 NORA Conference was far from normal. In order to successfully produce a safe event for members, NORA adapted to the times by implementing appropriate precautions and policies to ensure the safety of attendees. New, relevant sponsorships were incorporated, including face masks and hand sanitizers. Every attendee received comfort level ribbons (*red, yellow, and green*) to indicate their comfortability with social interactions. Conference session seating was placed socially distanced and routinely sanitized throughout each day.

The conference featured a variety of educational sessions headlined by keynote speaker, “The Colonel” Kevin Sweeney. The title of his address was: “*Leadership in Challenging Times: How to Deliver Peak Performance when the Heat is On*”. Additionally, speakers presented on the following topics:

- M&A: *Current Market Conditions*
- Construction Market Outlook
- What I Wish I Knew Before We Sold
- Trump or Biden?: *The Election’s Impact on the Economy Forecast & the Liquid Recycling Industry*
- The Future of Independent Used Oil Collectors
- PCBs: *What to Do When It Happens to You*
- Government Affairs Executive Summary

All speaker PowerPoints for the conference sessions are now available on-line in the members only section of the website.

The Conference concluded with the Poolside Closing Party: NORArityville.

NORA would like to thank the sponsors of the conference for their support (please see pages 32-35).

















PREMIER



WORLD OIL

HAND SANITIZER



KEY CARD



FACE MASK



LANYARD



NOTEBOOK



NORA 2020 CONFERENCE SPONSORS

AN ASSOCIATION OF RESPONSIBLE RECYCLERS

AUDIO/VISUAL



GOLD SPONSOR



American Testing Technologies, Inc.



A Division of Lubrizol



KEYNOTE SPEAKER



LIP BALM



INTERRACHEM

FLOOR



GRAND OPENING EXHIBIT



"Superior Service, Every Single Delivery."



CHARGING STATION



BAG



American Testing Technologies, Inc.



A Division of Lubrizol



PITTSBURGH'S OIL RECYCLER



NORA 2020 CONFERENCE SPONSORS

AN ASSOCIATION OF RESPONSIBLE RECYCLERS

GOLF

DEXSIL®

GOLF LUNCH

GOLF HOLE



DRINK TICKET

CAN COOLER



BAG INSERT

SPOUSE BRUNCH

THURSDAY BREAKFAST



FRIDAY BREAKFAST

CANDY BOWL



ΨNORArItaville

Brought to you by



CLOSING PARTY LEVEL 1



CLOSING PARTY LEVEL 3



CLOSING PARTY LEVEL 4



CLOSING PARTY LEVEL 5



NORA Supplier/ Vendor Directory



NORA Supplier/Vendor Members in good standing as of 1/28/2021 are listed below. Companies in **bold** have an ad in this magazine. Companies with a \$ are part of the **NORA \$ave** program by offering discounts/value added services to NORA members. Contact NORA to learn more about the **NORA \$ave** program.

ABS Materials, Inc.
a.patwardhan@absmaterials.com
919-345-2954
Filtration media

AECOM Corporation
Jack.Waggener@aecom.com
615-771-2480
AECOM Corporation is a full service engineering design firm with over 300 global offices and 100,000 employees. Services include process, environmental and construction engineering - water, air, solid waste, used oil and much more.

Air Products
info@airproducts.com
800-654-4567
Air Products is the world's largest producer and supplier of merchant hydrogen, and a leading global supplier of atmospheric gases such as nitrogen, oxygen and argon.

Amchem Inc.
craig@amcheminc.com
903-236-0138
Chemical Distribution

AMCS
nancy.byrne@amcsgroup.com
800-962-9264
AMCS provides software for the waste and recycling industry; this includes oil waste and recovery. The software provides detailed history, extensive billing options, container tracking, lab results, profiling, routing and dispatching.

American Testing Technologies
stacyl@americantestingtechnologies.com
877-634-9906
At ATT we provide a full range of analytical services to petroleum suppliers & users. We offer the highest quality testing of oils, fuels, biofuels, water & hazardous waste. Most tests are completed within 24 hrs. We are certified in PA, FL, NC & by NELAP

Axelrod Energy Projects, LLC
jaxelrod@axelrodenergyprojects.com
212-749-1902
Project Development, Brokerage, Market Consulting

Bedford Industries, Inc
david@bedfordindustries.com
360-770-0612
Manufacture a full line of oil filter crushers, drum crushers, and oil filter balers. On the market since 1989, the OBERG filter Crusher has stood the test of time.

Blue Process Advisors, LLC
mjebert@yahoo.com
219-841-2124
Consulting - Refining business management and technology

Bright Technologies a Division of Sebright Products, Inc.
abajric@sebrightproducts.com
269-793-7183

Brown Gibbons Lang & Company, LLC
ekaplan@bglco.com
216-920-6634
Investment Banking Firm

Brown Industrial Inc
craig@brownindustrial.com
937-693-3838
Technology leading custom designers & manufacturers of trailers & truck bodies for the rendering, oil filter recovery & recycling industries.

Build-All Corporation
dougpb@build-all.com
414-716-0023
Manufacturer of parts washers and degreasing equipment.

Catalyst Trading Co, LTD
rgarcia@resalecatalyst.com
713-926-6078

Hydrotreating Fresh Catalyst, Regen Catalyst, Pre-Sulfided Catalyst, Silica & Phosphorus materials, Reactor toppings, Ceramic support products, screening, recycled ceramic support, High Alumina support, re-packaging, and acquisition of spent catalysts.

Chem32 LLC
jespermarklund@chem32llc.com
409-883-8500
Catalyst Preactivation

Chemline Products Co
John@chemlineproducts.com
562-230-9166
Custom blended high performance coagulants, precipitants and flocculants delivered to you.

ChemTec LLC
bryangray@chemteccllc.com
812-499-8408

A superior line of used oil, wastewater, and antifreeze treatment chemicals.

ChemTreat
jlawson@chemtreat.com
865-250-5434

An industry leading supplier of water treatment and oil processing specialty chemicals.

Clairvest Group Inc
adrianp@clairvest.com
416-413-6014

We are an equity investment firm focused on partnering with business owners to help build strategically significant businesses. We have a focus on environmental services industry with six meaningful partnerships since 2006.

Coastline Chemical, Inc.
jdsharp@coastlinechemical.com
757-824-3831 Ext. 103
Antifreeze, Heat Transfer Fluids, Glycols, Lab Services

Dexsil Corporation \$
ckopylec@dexsil.com
203-288-3509

Easy-to-use on-site test kits for quickly screening used oil. Detect and quantify chlorine contamination in used oil or wastewater, and quantify water content of used oils. Dexsil also offers analytical lab services for used oil testing.

Dober Chemical Corporation
saroyan@dober.com
773-294-1870

Full service chemical manufacturer specializing in antifreeze additives, oil treatment, wastewater treatment, boiler water treatment, and cooling water treatment.



Providing Solutions for Used Oil Recyclers and Re-Refiners



Real experts. Real results.

- Emulsion Breakers
- H₂S Scavengers
- Deashing Agents
- Wastewater Treatment
- Cooling Tower Programs
- Boiler Water Treatment

VISIT WWW.CHEMTREAT.COM OR EMAIL JLAWSON@CHEMTREAT.COM FOR MORE INFO.

Dolphin Centrifuge

sales@dolphincentrifuge.com
248-522-2573

Dolphin Centrifuge specializes in Centrifuge based Oil Recovery Systems. Our systems are primarily built around New & Reconditioned Alfa Laval Centrifuges. Complete modules include Hi-Speed Disc Centrifuges, Automatic PLC Controls, Feed Pumps, Heaters etc

Double T Resources Inc.

terry.taliaferro@doubletresources.com
817-996-1198
Buy/Sale Bulk, Petroleum Distillates, Fuels, Crankcase lubes

Ecosorb International Inc.

larry@ecosorb.com
713-413-1173 x4714
Environmentally Friendly Absorbents

EHS Momentum

cduffie@ehsmomentum.com
469-999-2500
EHS Consulting and Software

EnergyLogic

tburgin@energylogic.com
615-471-5200
EnergyLogic manufactures and sells used oil furnaces and boilers, less than 500,000 Btu/hour in size.

Engine & Accessory, Inc.

racs@rampstar.com
305-573-2268
Waste Oil Trucks/Vacuum Trucks

Eurecat US

TCampbell@eurecat.com
832-284-0609
Supplier of regenerated hydrotreating catalyst, catalyst sulfiding/activation services, catalyst regeneration, and specialty grading

Flottweg Separation Technology, Inc.

lhuber@flottweg.net
859-448-2300

Fountain Industries LLC

bdea@ftnllc.com
800-328-3594
Fountain Industries LLC is proud to be an industry leading US manufacturer with complete product coverage of aqueous and solvent type parts washers in all capacities including spray cabinets and other speciality products.

Gallagher

john_wasilchuk@ajg.com
630-773-3800
Gallagher is an Insurance and Risk Management firm focused on reducing our clients actual and potential costs utilizing a unique, comprehensive approach to evaluating risk management programs.



"we enable humanity's progress through the shared responsibility we have to our environment while empowering future generations"



RECYCLING

Wastewater Treatment
Pre-Treatment
Customized Treatment
Filter Press
Containerized Wastes
Used Oil Blending
Preparation for:
Waste to Energy
Incinerator & Landfill

PARTNERSHIPS

Solidification (local landfills)
Waste to Energy
Incinerator
Roll-Off Dumpsters
Construction & Demo
Scrap Recycling
Beneficial Reuse
Hazardous Containers
Universal Waste

FIELD SERVICES

Hi-Vac Services
Tank Management
Site Assessment
UST/AST Tank Removal
Industrial Cleaning
Facility Decontamination
Contaminated Soil Removal
Railcar Tanker Cleanings
Confined Space Entry



📍 1076 Old Manheim Pike
Lancaster, PA 17601

📍 3300 Childs Street
Baltimore, MD 21226



WWW.ERCOFUSA.COM

GEA Group
Andrew.Rosina@gea.com
201-784-4309
Centrifuges-disc type and decanters for the purification of used oil and/ or wastewater. Biodiesel-separator and decanters used in Biodiesel Process.

Geophia LLC
pgkendrick54@gmail.com
704-502-8287
Absorption materials.

Greenberg Traurig, LLP
swickardt@gtlaw.com
916-442-1111

Harvest Fuels
mwilliams@harvestfuels.com
713-416-8147
Oil and Petroleum Trading

Haz^oMat Environmental Services
bill@hazmatnc.com
704-332-5600
Provides industrial cleaning, emergency response, hazardous & non-hazardous transportation & disposal, recycling of waste oil, fuels, oil filters, & glycols. Manufactures and sells antifreeze blends and glycol distillation equipment to ASTM standards.

Husky Corporation
jrulo@husky.com
636-825-7200
Husky Corporation serves the lube and industrial market with BJE oil filter crushers, tank monitors, gauges, and overfill alarms & accessories. Through enevo, we offer a web enabled electronic liquid level measurement system via cellular technology.

Hydrodec of North America, LLC
cynthia.repasky@hydrodec.com
330-409-8676
Used transformer oil re-refiner. Hydrodec collects & processes used transformer oil at any PCB concentration. As the only oil re-refiner to receive carbon credit approval from the American Carbon Registry, their product can be sold with a carbon offset.

IHS Markit
gil.marcha@ihsmarkit.com
832-679-7261
IHS is the leading research and consulting company to the global energy industry. IHS acquired Purvin & Gertz in November 2011, adding Purvin & Gertz' strengths in the petroleum refining, lubricants and base oil industries.

DOLPHIN CENTRIFUGE

Decanter & Disc Centrifuges

Remove Water & Solids (to 1 μ level) from:

- Used Motor Oil / Waste Oil
- Contaminated Diesel / Fuel Oil
- Fuel Oil or HFO upto 600 cSt
- Tramp Oil Recovery from Coolant

Dolphin Reconditioned* Centrifuges Offer:

- Over 50% Savings Compared to New
- No Filters or Disposable Media Cost
- Continuous Operation (24/7)
- Fully Automatic PLC/HMI Control Systems
- 6-Month Warranty; Life-time Technical Support

Call Jim Kraft at 248.522.2573 for more information.

DOLPHIN CENTRIFUGE

24248 Gibson Dr., Warren MI 48089, USA
T: 248.522.2573 F: 248.876.3024
sales@dolphincentrifuge.com



CELEBRATING
35
years

SYSTEMS INCLUDE:

- Pre-Strainers & Polishing Filters
- Fully Automatic PLC Control Panels
- Electric Pre-Heaters or Steam Heat Loops
- Sludge Tanks, Clean Oil Tanks, Pumps etc.
- Reconditioned Alfa Laval* Hi-Speed Disc & Decanter Centrifuge

The trademarks Alfa Laval*, Wetflax Separator* are property of their respective trademark holders. All references to these trademarks are for informational purposes only and are not intended to imply any endorsement by or affiliation with the trademark holders. These entities neither sponsor, nor endorse Dolphin Centrifuge or its products.

Imperial Industries Inc.

kristi@imperialind.com
800-558-2945

With more than 35 years of specialized experience in storing and handling dry and liquid materials. Imperial Industries is the trusted source for bulk storage tanks, commercial and agricultural waste handling equipment, and all of your service & parts

InCon Process Systems - GIG

Karasek GmbH
rscully@ips-gigk.com
630-305-8556

Offering 20 years experience in Used Oil distillation systems. Our clients range from fuel blenders wishing to upgrade to cleaner fuel or base oils and seek Modular Plants. Major clients upgrade to GIG Karasek Wiped Film Technology.



Innovative Fluids

tmclead@innovativefluids.com
216-385-8601

“Bulk” Windshield Washer Fluid and Antifreeze. Delivered in bulk to (25) states.

InTerraChem, LLC.

curtis.ellis@interrachem.com
812-858-3147

We offer a full line of Demulsifiers, Waste Water Treatment, H2S Scavengers, Cleaners, Degreasers & Antifreeze pre-treatment chemicals

Ironshore Environmental

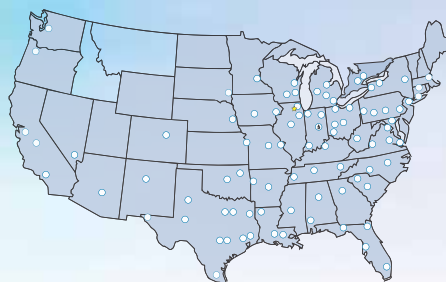
janet.rittenberry@ironshore.com
469-248-4355

Ironshore, a Liberty Mutual Company, offers a combined general liability and pollution liability insurance product that provides cover for fixed-site manufacturing, distribution and processing facilities with potential environmental risk exposures.

Jaxon Filtration

james@jaxonfiltration.com
706-675-3996
Filtration Equipment, Media, Custom Elements

**Nationwide Network.
Personalized Service.**



90,000+ Customers
20+ Years Experience
85+ Branches



877-938-7948 Crystal-Clean.com

Keteca USA, Inc.
kparks@ketecausa.com
602-278-7789

Offers alternatives to dangerous cleaning chemicals & high performance cleaning solutions with low V.O.C. emissions. Industrial parts & pressure washing, cnc sump & machine, offshore & land production tank & vessel, rig and frac tank cleaning solutions.

Kline & Company, Inc.
ian.moncrieff@klinegroup.com
973-615-3680

Lamb Fuels, Inc
kezin@lambfuels.com
619-421-0805
Buyers of recyclable fuels. Gas. Diesel. Jet. Avgas. Transmix.

LeBeouf Towing
mbourgeois@lebeouftowing.com
985-594-6691

Linde
844-445-4633
walter.renz@linde.com
Linde is a leading global industrial gases and engineering company. We live our mission of making our world more productive by providing a wide range of technologies, services, and gases such as hydrogen, oxygen, and nitrogen to a variety of end markets.

Lone Wolf Petroleum Co
eric@lonewolfpetro.com
713-416-8203
Fuel Buyer

Marsh & McLennan Agency -
Environmental Insurance Group
Scott.shepherd@marshmma.com
336-346-1347
Marsh & McLennan Agency works with large & mid-sized companies across the United States to provide:Insurance & Risk Management Solutions,Licensed Professional Geologists/Engineers on staff,Lower Total Cost of Risk,Industry Specific Claim Advocates

Marsh & McLennan Agency, locally known as J. Smith Lanier
matt.fox@marshmma.com
229-349-4206
Insurance/Risk Management Services

VACUUM TANK



•5,000-8,000 gallons

Larger/custom size available upon request

- Optional anti-corrosion interior tank coating
- Optional OSHA approved catwalk with handrail
- Carbon and stainless steel tank options

Tanks available in your choice of steel, stainless steel, or aluminum

- Vacuum pump and blower options available
- 11R 22.5 wheels (options available)
- Available in 407/412 code

VAC3000 SERIES FEATURES

- **407-412 DOT CONSTRUCTION**
- **STANDARD STOCK SIZES**
3200 and 3600 gallons
- **OPTIONS: VACUUM PUMP/BLOWER/ LIQUID RING**
Vacuum pump options from Masport, NVE, Fruitland and Hicon
- **INTERIOR BAFFLES**
Flanged and dished head baffles
- **HYDRAULIC OPERATION**
Hydraulic vacuum pump, 3-stage hoist and rear opening door

- **ALUMINUM HOSE TRAYS**
26" bolt on hose trays
- **OPTIONAL OSHA PLATFORM**
OSHA platform and guardrail
- **ROLL OVER PROTECTION**
- **HEAVY DUTY BUMPER**
Step bumper with grip strut steps
- **EMERGENCY SHUT OFF**
- **TRAILER OPTIONS AVAILABLE**



Contact us at : **(800) 558-2945**

Website | Imperialind.com | Septictruckcenter.com
Instagram - Facebook - YouTube | Imperial Vacuum Trucks
Email | Salesinfo@imperialind.com

MemPore Environmental
Technologies
alanfox@mempore.com
844-636-7673
Nano-filtration membrane systems for
converting used oil into base stock

Modern Fuels LLC
tgm@modernfuels.com
940-3008790
Fuels Technology Licensing

MultiTherm LLC
medie@multitherm.com
610-408-8361
Leading supplier of Heat Transfer
Fluids and System Cleaners. Within
a temperature range of -15 degrees
F to 660 degrees F, MultiTherm
can successfully and economically
accommodate a customer's heating or
cooling requirements.

National Chemical Supply Corp
natlchem@gmail.com
800-515-9938
Manufacturer of the new, EB-series of
oil demulsifiers that treat oil and water
at the same time.

National Petroleum Products Co.
info@nppc.qa
974-490-3839
Processing of used oil.

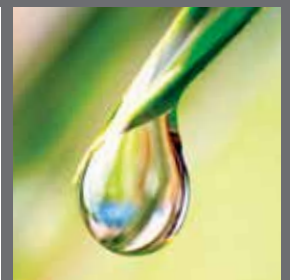
Navusoft, LLC
cfairchild@navusoft.com
713-338-2222
Software

NPS Spill Control LLC.
ckeagle@npsspillcontrol.com
630-450-6568
Oil absorbent and spill control products
(environmental, industrial, hazmat).

Nuance Solutions
matt.ahrens@nuancesolutions.com
800-621-8553
Since 1972, Nuance Solutions has formu-
lated and manufactured specialty cleaning
chemistry to serve industrial consumers.
We also offer custom dispensing systems
to ensure consistent performance, employ-
ee safety and cost control.

Oilmen's Truck Tanks Inc.
thill@oilmens.com
800-859-8265/ 864-573-7400
Truck-mounted Tanks and Trailers for
Waste Oil Recovery. Certified Design
Engineer in-house. All major brands
of trucks available. Equipment for
transportation, safety, and bulk storage
sites. Certified R Stamp facility for wreck
repair and remounts.

WE RECYCLE



ORG CHEM GROUP is a Major Leader in the recycling of used antifreeze in the United States. We work closely with collectors across the U.S. and Canada.

ORG CHEM GROUP purchases used antifreeze which allows collectors a safe, efficient way to properly manage their used antifreeze /glycol streams while at the same time providing them with a consistent revenue stream.

Our process extracts the Ethylene Glycol from used antifreeze, purifies it and blends it with proprietary additives to create new antifreeze that offers the benefits of lower cost and recycling.

ORG CHEM GROUP offers Ethylene and Propylene Glycol for sale and a full line of Antifreeze products available in cases, drums, totes and bulk.



For more information
please contact:
Jerry Brown
812-395-7726
Cel: 812-449-0411

11210 Solomon Rd,
Troy IN 47588
Chem-Group.com



PESCO - Integrated Used Oil and Solvent Recovery Systems

- Custom Designed and Built by PESCO
to Meet your Specific Needs

- Multiple Polishing Options Available



- Turnkey, skid mounted systems ready to
connect to your utilities and tanks

- Our personnel
on-site for Loop
Check, Start-up
and Training



- Ongoing Technical Support (remote and onsite) as needed

THE DIFFERENCE IS **CLEAR**



Pragmatic Environmental Solutions **CO**mpany

www.pescova.co

luke@pescova.co

540-206-2786

Over 25 years of experience ~ Oil and Solvent Recovery Systems Operating around the World

Onken Inc
gurish@onkens.net
309-562-7271
Oil Storage Tanks

Orbizorb LLC. DBA Dirteeze-US
roy@dirteezeus.com
414-405-0223
MASTER wholesaler of wet wipes and
non-wovens

Par-Kan Company
ahepler@par-kan.com
260-352-2141
Par-Kan is proud to offer a full line of
grease and oil filter collection containers,
poly or theft deterrent steel lids, and var-
ious options to meet your needs. We take
pride in being our customers solutions
provider. We look forward to serving you!

Paratherm a Division of Lubrizol
rritz@paratherm.com
610-941-4900
Superior heat transfer fluids ranging
from -127°F to +675°F Refined
petroleum & synthetic oils & thermal
system cleaners Antioxidant Additives
Fluid Analysis Technical Support &
Training We stock what we sell all the
time in all volumes available globally

PegEx, Inc.
david.dipasquale@pegex.com
608-210-4202
Environmental Services & Software

**PESCO - Pragmatic Environmental
Solutions Company**
luke@pescova.co
540-206-2788
Over 30 years in quality solvent and
used oil recovery. Custom designed and
built complete turnkey, skid mounted,
affordable systems with bauxite, solvent
extraction and hydrotreating lube
polishing options. Engineered to meet
your specific product goals.

Porocel International
nshah@porocel.com
832-688-9696
Porocel is a major supplier of catalysts
and metal traps to the re-refining
market. Our actiCAT catalyst
presulfurization makes startups quick
and easy. Our Rocket bauxite polishing
system offers key advantages over other
filtration solutions.

RADIAN

Chemicals

A **GREEN** Approach to the
Management of Spent Solvents

www.radianchemicals.com

281.883.4389



Centralized Waste Treatment



Ohio ♦ West Virginia ♦ Kentucky ♦ Maryland
 Texas ♦ Oklahoma ♦ Missouri ♦ Indiana
 Tennessee ♦ Alabama ♦ Virginia ♦ Michigan ♦ Colorado

- ✓ Oily Wastewater, Organics, Leachate, Solidification
- ✓ Recycled Fuel Oil Purchase Programs
- ✓ Industrial and Retail Used Oil Collection
- ✓ Transportation via Tanker, Rail and Barge
- ✓ New Industrial Oil Manufacturing and Used Oil Reclaim Services
- ✓ Recycled Petroleum Products/Distillates Processing (RPP)
- ✓ Consumer Product Destruction and Recycling
- ✓ Surfactant Recovery and Beneficial Reuse
- ✓ Container Management and Waste-to-Energy Processing
- ✓ Industrial Cleaning and Field Services



www.valicor.com
 800-279-1134



Progressive Rail, Inc
jbuck@progressivrail.com
618-910-8273
Rail transportation and rail/truck
transloading

PT
ali.kirtley@ptcoupling.com
580-237-4033
Manufacturer of American-made quick
connect/disconnect couplings, safety
pumping systems, tank connections and
overall hose accessories.

Quest Resource Management Group
Dave.Sweitzer@questrmg.com
877-321-1811
Quest delivers comprehensive waste
minimization and environmental
protection with nationwide waste
collection and recycling services. We
help dealerships, collision centers and
fleet operators reduce waste, risk and
cost while streamlining operations.

Radian Chemicals LLC
jspain@radianchemicals.com
281-883-4389
Management of spent solvents for
beneficial reuse and/or treatment for
recycle or disposition. Spent caustics,
glycols, amines, polyols, methanols, etc.

Seneca Tank
mmenard@senecatank.com
816-604-9776

Sensoneo
jbryson@sensoneousa.com
602-321-5613

Sequoia Global Inc.
rohit.joshi@sequoia-global.com
703-565-2558
Vacuum distillation, wiped-film/
short-path evaporation, hydrotreating,
adsorption, vapor compression
technologies for recycling used motor
oil, transformer oil, antifreeze/ coolants,
wastewater and fuel. 15 years of
experience on 4 continents.

WC Leasing

**The industry-leading
expert in equipment
financing.**

- **Operating Leases**
- **\$1 "Buyout" Leases**
- **Traditional Financing Options**
- **Equipment Brokerage and Acquisition Services**

**CONTACT GERRY GORDON
AT (228) 596-0771 OR EMAIL
GGORDON@WCLEASING.COM**

WE SPECIALIZE IN:

- **OIL RECOVERY AND RECYCLING EQUIPMENT — TRUCK MOUNTED AND FIXED ASSETS**
- **VACUUM TRUCKS AND TRAILERS**
- **ROLL-OFF TRUCKS, TRAILERS AND BOXES**
- **TRANSPORT TRUCKS AND TRAILERS**



408 HIGHWAY 49 SOUTH • RICHLAND, MS 39218 • (888) 454-5106 • WWW.WCLEASING.COM

LET WORLD OIL HELP NAVIGATE ALL YOUR **HAZARDOUS AND NON-HAZARDOUS WASTE NEEDS**



WORLD OIL

Doing right, in everything we do.™

 **NORA**



(310) 537-7100



www.worldoilcorp.com
info@worldoilcorp.com

WHAT WORLD OIL CAN DO FOR YOU

Used Oil Collection and Recycling Services / Used Antifreeze
Collection and Recycling Services / Used Oil Filters / Container-
ized Waste Services / Vacuum Services / Field Services

.....

SESCO

jstout@sesco-inc.com
260-422-1671

SESCO has become the preferred source for oil purification, regeneration, and fluid conditioning equipment. Its reputation has been built from a foundation of solid engineering, quality manufacturing, and a commitment to customer support and service.

.....

Spartan Tank and Trailer
stephen@spartantank.com
864-706-6310

Fuel Trucks, Bulk Oil Trucks, Waste Oil Trucks, DEF Trucks, Parts

.....

SpillTech
sueg@spilltech.com
800-228-3877

.....

StillClean
jodom@stillclean.com
800-628-7657

.....

Strategic Transportation Resources Inc
robert@strlogisticsolutions.com
226-979-5890
Tank trailer leasing and financing

.....

Summit Environmental Technologies
lpachecoset@aol.com
615-794-9437
Full service QAQC environmental laboratory. Emphasis and experience with liquid recycling and environmental service industries. Nelac and AZLA ISO certifications.

.....

Sweet Gazoil Inc.
louisbertrand10@gmail.com
514-502-5098
Engineering solutions to improve your current operations or design turnkey plants. Based on more than 15 patents our process can treat used/waste oils, VTAE and mixed waste plastics (#4, 5, 6, 2,7) ensuring long term profits and feedstock availability.

.....

Texas Molecular
fmarine@texasmolecular.com
281-930-2500

.....

The Fedeli Group
rsnyder@thefedeligroup.com
216-643-2753
Insurance & Risk Management

.....

The Lab People LLC
Scholes2147@gmail.com
281-474-1334
We specialize in the testing of used oils. We also test fuels, biofuels, gasoline, chemicals, water, and soils. We offer technology to reduce ash and metal from used oils.

Lab Services For Suppliers
CARBON CREDITS FOR SPENT OIL
Permitted TSD Facility - NEW!
Unlimited PCB Concentrations - NEW!
Best Demonstrated Technology For Sustainability



Transform your oil for good™

Hydrodec of North America, LLC.
2021 Steinway Boulevard, S.E.
Canton, Ohio 44707

Phone: (330) 409-8676
Email: cynthia.repasky@hydrodec.com
Web: www.hydrodec.com



The Penray Companies
wpeinhardt@penray.com
800-323-6329
Antifreeze Inhibitors

Thermopac Process Engineering LLP
gm@thermopac.in
91-22-2617-8080

TIPCO Technologies
RobL@tipcotec.com
410-984-7517
Hose Assembles & Accessories

Titan Logix Corp.
natashad@titanlogix.com
780-462-4085

Transcourt Tank Leasing Inc.
srogers@transcourt.com
773-800-2617
Transcourt provides leasing and long-term rental solutions for the liquid and dry bulk tanker market. Our fleet includes new and used stainless steel chemical trailers, aluminum crude oil and petroleum tankers, pneumatic dry bulkers and propane/LPG units.

Trihydro Corporation
grisse@trihydro.com
678-428-5308
Trihydro is a national engineering and environmental firm offering due diligence; air & wastewater design/ops; multi-media permitting, compliance audits; soil & groundwater assessment/remediation services to NORA member industries.

Uni-ram Corporation
jay@uniram.com
800-417-9133
Recycling parts washers, spray gun cleaners, solvent recyclers

WasteBits
dpatterson@wastebits.com
844-7240200
Online waste management platform

WC Leasing
ggordon@wcleasing.com
228-596-0771
WC Leasing is a full-service leasing company focusing on industrial and environmental equipment. We provide, operating, track and capital leases and straight financing with flexible terms. We also assist in locating new and used equipment and brokerage.



**UNIVERSAL
ENVIRONMENTAL
SERVICES**

A MEMBER OF  AVISTA OIL

**Universal Environmental Services is a
comprehensive environmental service company**

- 💧 Complete Used Oil Service Program
- 💧 Base Oil GII+ and GIII
- 💧 Industrial Services
CSE, Certified Tank Inspection, OWS, Sump Service
- 💧 Hazardous Waste Management Program



Southeast's Only Base Oil Re-Refinery

1-800-988-7977



www.universalenvironmentalservices.com

WEBA Technology
dkelly@webacorp.com
773-343-7537

Weba Technology develops, manufactures, and markets additive packages for the antifreeze/coolant, gas patch, coolants, and heat transfer fluid industries.

Werts Welding & Tank Service, Inc.
bruce@wertswelding.com
618-254-6967

Transportation tanks and trucks and all related parts and equipment. Pumps, hoses, fittings and valves. 8 locations across the USA.

**XL Insurance
Division of AXA \$**

matthew.gartner@axaxl.com
610-968-9294

The environmental division of the XL Insurance companies offers integrated environmental risk management solutions through insurance, loss control and claims management to leading businesses.

Zurich
steven.goebner@zurichna.com
215-300-9122

Zurich's Environmental Insurance unit helps businesses navigate the ever-changing world of environmental risk. We provide easy-to-understand environmental insurance solutions that can be customized to help meet customers' needs for today and the future.



Oil & Filter RECYCLING EQUIPMENT

Industry leaders of
oil recycling containers &
roll-offs for over 25 years.

800-291-5487

Silver Lake, IN

www.Par-Kan.com





XL Insurance

Integrated insurance solutions



XL is now part of the AXA family. With greater strength than ever before behind us, our environmental team provides integrated insurance solutions for the liquid recycling industry that include

- Property & Casualty coverage
- Pollution coverage, tailored to customer needs
- Specialized risk consulting and claims management services

Contact

Matt Gartner

VP, Environmental P&C

610 968 9244

matthew.gartner@axaxl.com



**Highest customer satisfaction
among large commercial
insurers, three years in a row**

XL Catlin, now a part of AXA XL, received the highest score among insurers in the J.D. Power 2016-2018 Large Commercial Insurance Studies of customers' satisfaction with their commercial insurance. Visit jdpower.com/awards

AXA, the AXA and XL logos are trademarks of AXA SA or its affiliates. AXA XL is a division of AXA Group providing products and services through four business groups: AXA XL Insurance, AXA XL Reinsurance, AXA XL Art & Lifestyle and AXA XL Risk Consulting © 2018 AXA SA or its affiliates. In the US, the AXA XL insurance companies are: AXA Insurance Company, Catlin Insurance Company, Inc., Greenwich Insurance Company, Indian Harbor Insurance Company, XL Insurance America, Inc., XL Specialty Insurance Company and T.H.E. Insurance Company. Not all insurers do business in all jurisdictions nor is coverage available in all jurisdictions.



FAST RESULTS

Dependable Tools for Testing Used Oil



Clor-D-Tect 1000®

TOTAL CHLORINE
IN USED OIL

YES/NO AT 1000 PPM

RESULTS IN 5 MINUTES

US EPA SW-846, Method 9077
ASTM Method D-5384

Clor-D-Tect Q4000®

QUANTITATIVE TEST FOR
CHLORINE IN USED OIL

RANGE: 200-4000 PPM

RESULTS IN 5 MINUTES

US EPA SW-846, Method 9077
ASTM Method D-5384



HydroSCOUT®

WATER IN OIL ANALYSIS

RANGE: 0-100%

RESULTS IN 5 MINUTES

US EPA SW-846,
DRAFT METHOD 9001

DEXSIL®

203.288.3509 | WWW.DXSIL.COM