

Proven Asphalt Shingle Recycling

BrandTECH



THE BIG PROBLEM: A silent ecological disaster of unmeasurable proportions is leeching into the ground and ground water of the United States and has been for many decades. Over 22 Million barrels (BBL's) of oil is buried in American landfills annually within asphalt shingles. Until now, there has been no viable solution to this catastrophe that is annually 4.4 times larger than the Deep-Water Horizon disaster, America's largest oil spill that released 4.8 million BBL's of oil into the Gulf of Mexico.



Figure 1: Mountain of Waste Asphalt Shingles.

THE PROVEN SOLUTION: BrandTECH an American entrepreneurial company has invented and refined a new technology and process to solve this environmental catastrophe. This proprietary new process deconstructs an asphalt shingle and reclaims all the elements of the shingle to be sold and reused. These highly valuable elements include high-grade oil, aggregate, and clean fiberglass. In full production, the destructive legacy of burying shingles in landfills is stopped forever.

HOW: The patented and trademarked proprietary process, equipment, and chemicals 100% deconstruct shingles in an environmentally sound method to be performed in rural markets creating thousands of jobs for Americans. Over two barrels of oil is captured from every ton of asphalt shingle waste processed with no environmental byproduct. Hundreds of tons of reclaimed shingles have successfully been deconstructed and high-grade oil has been sold. (Proven Technology)

WHY: We care about Americans, our economy, our environment, our water supply, and their respective future; how we as a nation currently manage waste asphalt shingles is destructive to all of these. Our technology is new and proven the process solves this problem in an environmentally safe way, and benefits all of America:

1. Environmentally safe process
2. Reduces the dependence on foreign oil
3. Reduces the need for conventional oil drilling and other methods
4. Reduces carbon footprint.
5. The potential creation of 1,000s of living wage jobs in rural markets
6. Potential to add billions of dollars to America's GDP annually
7. Non-taxpayer subsidized energy from recycling
8. Turns an ecological disaster into a positive while creating a new prosperous industry
9. Once implemented, the United States can be a proven leader in helping other countries learn to recycle this valuable resource.



Figure 2: Oil Produced from Waste Asphalt Shingles.

HOW CAN YOU HELP: Unfortunately, antiquated government regulations and outdated bureaucratic processes have stalled implementation of this proven technology, a new paradigm and technology that should be endorsed by all Americans. The problem is multi tired.

1. Regulations are antiquated and not designed with innovation in mind.
2. In the past, attempts to recycle asphalt shingles have failed
3. Used Asphalt Shingles are currently wrongly classified by some states as a waste liability.
4. Removed asphalt shingles should be considered a National resource similar to used: Steel, Cardboard, Glass, or Aluminum. All of which today are often 100% recycled and reused.



Figure 3: Full Oil Tanker of Recycled Asphalt Shingle High Quality Oil being shipped to market.

We need your help in examining and changing existing policies and regulations to enable reclassification and processing of Asphalt Shingles and similar materials.

BrandTECHco.com

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BrandTECH Corporation

Proven Proprietary Technology

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 4, 2018

HOWARD BRAND
OWNER
BRANDLICH HOLDINGS LLC
PO BOX 1370
FREER TX 78357-1370

Permit by Rule Registration Number: 148963
Brandlich Holdings LLC
Brandlich Energy Solutions
Elmendorf, Bexar County
Regulated Entity Number: RN109754820
Customer Reference Number: CN605357649

This is in response to your registration Form PI-7 regarding the Brandlich Energy Solutions located at 14348 Donop Rd, Elmendorf, Bexar County.

Brandlich Holdings LLC has registered the emissions under Title 30 Texas Administrative Code (TAC) §§ 106.261, 106.262, and 106.473. For rule information see: www.tceq.texas.gov/permitting/air/nav/numerical_index.html

The company is also reminded that these facilities may be subject to and must comply with other state and federal air quality requirements.

If you need further information or have questions, please contact Mr. David Reyna at (512) 239-6051 or write to the Texas Commission on Environmental Quality (TCEQ), Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under the authority delegated by the Executive Director of the TCEQ.

Sincerely,

A handwritten signature in black ink, appearing to read "Samuel Short", with a long horizontal line extending to the right.

Samuel Short, Manager
Rule Registrations Section
Air Permits Division

cc: Air Section Manager, Region 13 - San Antonio

Project Number: 276764



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Texas Pollutant Discharge Elimination System
Stormwater Multi-Sector General Permit

The Notice of Intent (NOI) for the facility listed below was received on April 20, 2017. The intent to discharge stormwater associated with industrial activity under the terms and conditions imposed by the Texas Pollutant Discharge Elimination System (TPDES) stormwater multi-sector general permit TXR050000 is acknowledged. Your facility's TPDES multi-sector stormwater general permit authorization number is:

TXR05DH50

Coverage Effective: April 20, 2017

Sector: N Primary SIC code: 5093

TCEQ's stormwater multi-sector general permit requires certain stormwater pollution prevention and control measures, possible monitoring and reporting, and periodic inspections. Among the conditions and requirements of this permit, you must have prepared and implemented a stormwater pollution prevention plan (SWP3) that is tailored to your industrial site. As a facility authorized to discharge under the stormwater multi-sector general permit, all terms and conditions must be complied with to maintain coverage and avoid possible penalties.

Project/Site Information:

RN109754820

Elmendorf Yard

14348 Donop Rd

Elmendorf, TX 78112

Bexar County

Operator:

CN605357649

Brandlich Energy Solutions, LLC

PO BOX 1370

Freer, TX 78357

This permit expires on August 14, 2021, unless otherwise amended. If you have any questions related to processing, you may contact the Stormwater Processing Center by email at swpermit@tceq.texas.gov or by telephone at (512) 239-3700. For technical issues, you may contact the stormwater technical staff by email at swgp@tceq.texas.gov or by telephone at (512) 239-4671. Also, you may obtain information on the TCEQ web site at http://www2.tceq.texas.gov/wq_dpa/index.cfm. A copy of this document should be kept with your SWP3.

Issued Date: April 20, 2017

A handwritten signature in black ink, appearing to read "R. A. Hylleberg".

FOR THE COMMISSION

ACH Remittance Advice

Check Date: 8/17/2018 Check Number: 8002159



Brandlich Energy
Solutions San Antonio LLC
1001A E. Harmony Rd. #419
Fort Collins, CO 80525

Allied Petrochemical, LLC
2330 FM 2917
Alvin, TX 77511

Phone: 281-393-1233
Fax: 281-393-1242

Deposit will be sent to:

Vendor Name: Brandlich Energy
Bank Name:

For payment on Account:

Reference Number	Reference Date	Voucher Number	Gross	Discount	Net
IN001	8/17/2018	15726	5,118.63	0.00	5,118.63

Totals: 5,118.63 0.00 5,118.63

If you have any questions regarding this payment, please contact Diane Woody at dwoody@alliedpetrochem.com

ACH Remittance Advice

Check Date: 10/12/2018 Check Number: 8002383



Brandlich Energy
Solutions San Antonio LLC
1001A E. Harmony Rd. #419
Fort Collins, CO 80525

Allied Petrochemical, LLC
2330 FM 2917
Alvin, TX 77511

Phone: 281-393-1233
Fax: 281-393-1242

Deposit will be sent to:

Vendor Name: Brandlich Energy
Bank Name:

For payment on Account:

Reference Number	Reference Date	Voucher Number	Gross	Discount	Net
IN002	10/11/2018	16173	8,700.62	0.00	8,700.62

Totals: 8,700.62 0.00 8,700.62

If you have any questions regarding this payment, please contact Diane Woody at dwoody@alliedpetrochem.com



Allied Petrochemical, LLC
 2330 FM 2917
 Alvin, TX 77511

PO Number
18697

Phone: 281-393-1233
 Fax: 281-393-1242

Purchase Order

Ordered From:

Brandlich Holdings LLC
 1001A E. Harmony Rd. #419
 Fort Collins, CO 80525
 Phone: n/a, Fax:

Ship To :

Allied Petrochemical
 2330 FM 2917
 Alvin, TX 77511

Vendor #	Purchasing Contact	Freight Terms			Terms		
BHD	Donald Davis				Net 10		
Ship Via	Order Date	Ship Date	Due Date				
QC Energy	10/10/2018	10/10/2018	10/10/2018				
Product	Number of Packages	Packaging	Total Quantity	U M	Unit Price	Amount	

Asphalt Oil (ASPHALTOIL)	163.3	1 B BULK	163.3	B	USD 53.28/B	USD 8,700.62
Fuel Oil Cutterstock						

Merchandise USD 8,700.62

Trailer: 84104
 Gross: 85480 Tare: 33840 Net: 51640
 API: 24.7@60 7.53 lbs/gal
 6857.9 gallons
 163.3 barrels

Total USD 8,700.62