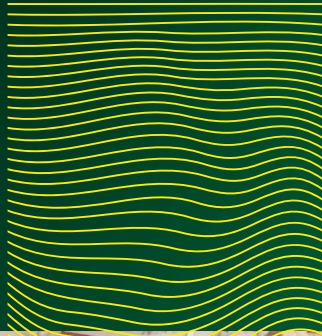




RLI Marine

RENEWABLELUBE.COM



EPA VGP LEGISLATION



A Marine Guide

to Environmentally Acceptable Lubricants

The United States Environmental Protection Agency (EPA) enacted the Vessel General Permit (VGP) legislation on December 19, 2013, introducing a comprehensive framework to regulate the use of lubricants in maritime operations. A key provision, VGP Section 2.2.9, mandates the use of Environmentally Acceptable Lubricants (EALs) in all oil-to-sea interfaces, provided it's technically feasible. These EALs, defined as biodegradable, minimally toxic, and non-bio-accumulative lubricants, must meet specific criteria outlined in the permit's Appendix A. The VGP legislation extends its influence to a wide array of maritime equipment, including propulsion systems, stabilizers, and hydraulic fluids, aiming to minimize the environmental impact of vessel operations.



A Vital Choice for MARITIME COMPLIANCE

MARINE LUBRICANTS

Compliance necessitates stringent record-keeping practices, ensuring Safety Data Sheets and Technical Data Sheets for all EALs used are maintained. Real-world applications of these EALs, including success stories from the Port of Los Angeles to the James River Reserve Fleet, underscore their high performance and environmental benefits. Moreover, RLI offers a comprehensive line of marine lubricants to meet the diverse needs of the maritime industry while safeguarding the environment, making the use of EALs a pivotal choice in both compliance and sustainability. Renewable Lubricants EALs offer high performance while safeguarding the marine environment, making them a preferred option for a variety of maritime applications.

AFFECTED EQUIPMENT

- Wire Rope
- Propulsion Pod Lube
- Stern Tubes
- Paddlewheel
- Controllable Pitch Propellers
- Azipods
- Rudder Bearings
- Stabilizers
- Thruster Azimuth Bearings
- Thruster Hydraulic Fluids
- Towing Notch Interface
- Mechanical equipment subject to immersion (*e.g., dredges*)

EAL PRODUCTS IN USE

A variety of EAL products are making a difference in maritime operations, including:

- Bio-Penetrating Lubricant
- Bio-SynXtra TC-W 2-Cycle Engine Oil
- Bio-SynXtra ATF
- Bio-Ultimax 1000 ISO 68 Hydraulic Oil
- Bio-SynXtra HP HD Engine Oil SAE 15W40 HD
- Bio-Air Compressor Fluid AC30
- Bio-180 High-Temperature Multi-Purpose Lithium Grease NLGI #2



EAL IN ACTION

PROVEN HIGH-PERFORMANCE CASES



Port of Los Angeles

Berth 93 at the Port of Los Angeles, home to modern cruise ships, uses Bio-Ultimax 1000 ISO 46 High-Performance Hydraulic Fluid to lubricate gangways.

NOAA Nancy Foster

All hydraulic systems on board use Bio-Ultimax 1000 Hydraulic Fluids for oceanic research in the Atlantic.

James River Reserve Fleet (Ghost Fleet)

The service ships in the James River Reserve Fleet use EAL/VGP compliant lubricants.

EPA Ship Lake Guardian

Has been successfully using Bio-Ultimax™ 1000 Hydraulic Fluid ISO 46-68 for over a decade. This high-quality hydraulic fluid has been proven effective in both Stern Tube Lube and various deck hydraulic equipment applications. Many original equipment manufacturers (OEMs) exclusively endorse low ash (zinc-free) and low EP hydraulic fluids with exceptional seal compatibility for Stern Tube use.



REAL-WORLD

Implementations

1

Kiewit and Nelson Petroleum | Large construction company Kiewit in Washington worked with Nelson Petroleum, ordering Bio-180 Grease, Bio-E.P. Wire Rope, and Bio-Ultimax Hydraulic Fluids for their operations.

2

Curtin Maritime | A medium-sized company in Long Beach, California, needed to comply with the EPA/VGP. They ordered Bio-180 Grease, Bio-E.P. Wire Rope, and Bio-Ultimax Hydraulic Fluids directly from RLI.

3

Station Atlantic City | In Atlantic City, New Jersey, various facilities and equipment use a range of EAL products, including Bio-Penetrating Lubricant, Bio-SynXtra ATF, and more.

FEATURED RLI EAL PRODUCTS



BIO-ULTIMAX 1000 HYDRAULIC FLUID

- Biodegradable hydraulic fluid that outperforms mineral oil-based alternatives.
- Exceptional anti-wear properties and resistance to moisture and rust.
- Environmentally friendly and meets or exceeds pump requirements.



BIO-HIGH TEMP 180 GREASE

- High-temperature bio-based grease with excellent load-carrying ability and resistance to water and corrosion.
- Ultimately biodegradable and environmentally friendly.
- Suitable for a wide range of applications, including industrial machinery and marine use.



BIO-EP WIRE ROPE LUBRICANT

- Biodegradable wire rope lubricant with anti-wear and extreme pressure properties.
- Provides a protective coating and deep penetration, preventing rust and wear.
- Offers exceptional protection in heavy loading and shock loading situations.



BIO-AIR COMPRESSOR FLUID (AC-30)

- Ultimately biodegradable bio-based/synthetic formula for air compressors.
- High viscosity index for improved thermal shear stability and load capacity.
- Low volatility, excellent anti-wear performance, and low toxicity.



BIO-SYNXTRA AUTOMATIC TRANSMISSION FLUID (ATF) PLUS

- Transmission fluid with a shear-stable, multi-grade viscosity suitable for various applications.
- Offers improved shear stability and torque capacity.
- Meets and exceeds performance requirements for a range of equipment.

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RLI WEB



RLI LINKEDIN



These environmentally acceptable lubricants are suitable for a variety of applications, such as

- Sewer • Waste • Construction • Utilities
- Roadwork • Marinas/Ports • Water Treatment