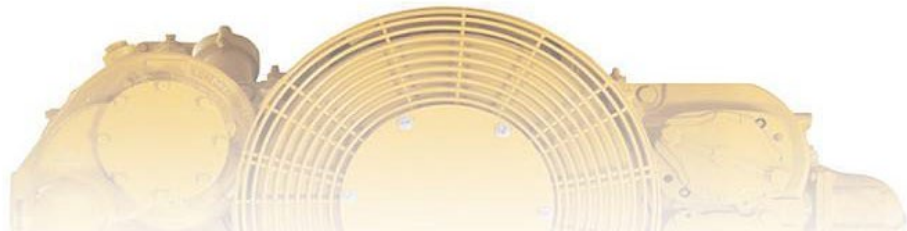


POWER

LARGE POWER SYSTEMS DIVISION

Caterpillar Lafayette Large Engine Facility



About Lafayette

Office: 146,000 Sq. Ft./ 13,564 Sq. M

Factory: 1,313,756 Sq. Ft./123,171 Sq. M

Welcome Center: 15,180 Sq. Ft./1,410 Sq. M

Land: 250 Acres

Land In Use: 197 Acres

Employment: Approximately 1,772

Lafayette Population: 70,783

West Lafayette Population: 44,595

Tippecanoe County: 186,251

Purdue University: 49,639



Opened in 1982

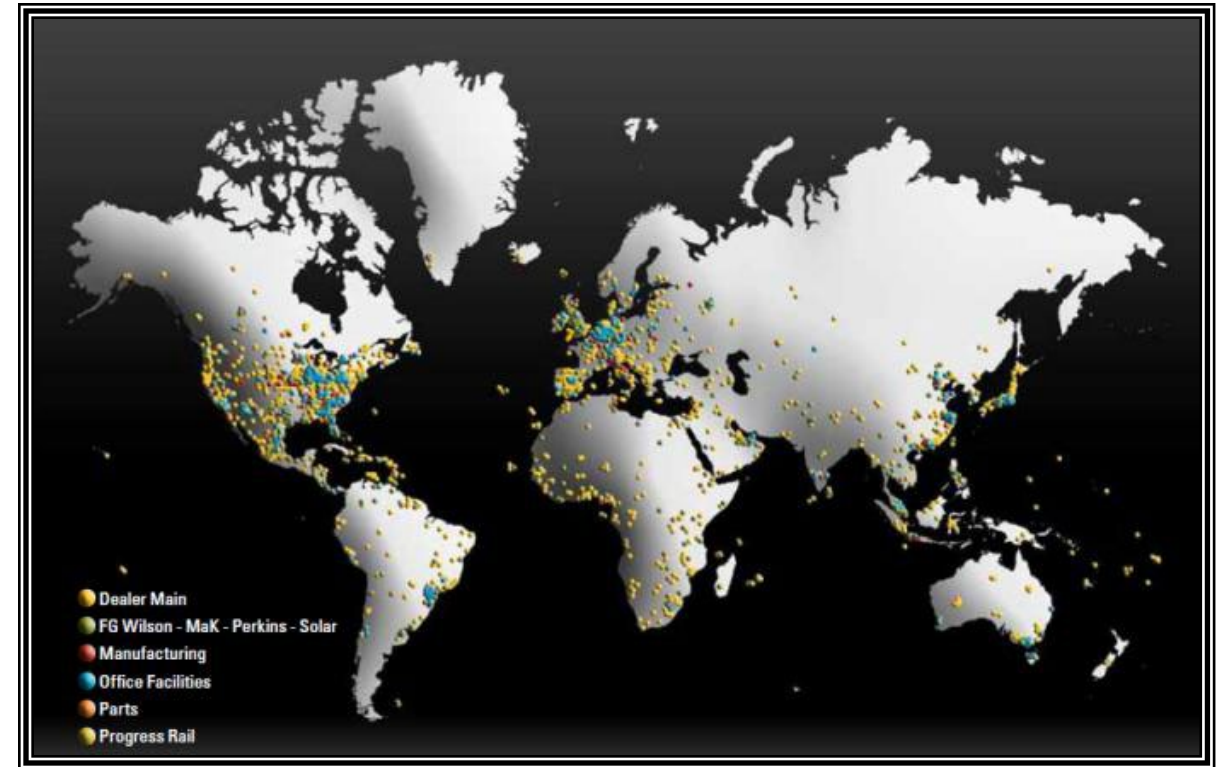


Caterpillar Facilities

- World's Largest Manufacturer of
 - Construction & Mining Equipment
 - Diesel & Natural Gas Engines
 - Industrial Gas Turbines
 - Diesel-Electric Locomotives
- 61% of Caterpillar Sales outside the U.S.
- 107,700 Caterpillar Employees worldwide

Caterpillar at a Glance

- Over 4 million machines and engines in active use
- 18 Primary Industries
- Leading U.S. Exporter
- 107,700 Global Employees
- 160 Cat Dealers serving 192 Countries
- 172,000+ Cat Dealer Employees
- 2,901 Dealer Facilities
- \$1.7 Billion Research & Development



MARKET SEGMENTS



LOCOMOTIVE



ELECTRIC
POWER



OIL & GAS



MARINE



MINING

The World's Power Source



LAFAYETTE LARGE ENGINE CENTER

CATERPILLAR CONFIDENTIAL: GREEN

CATERPILLAR[®]

3616

4000 – 5500 kW / 5579 – 7268 Hp

C175 - 16

2000 – 3000 kW / 2972 – 4376 Hp

G3516

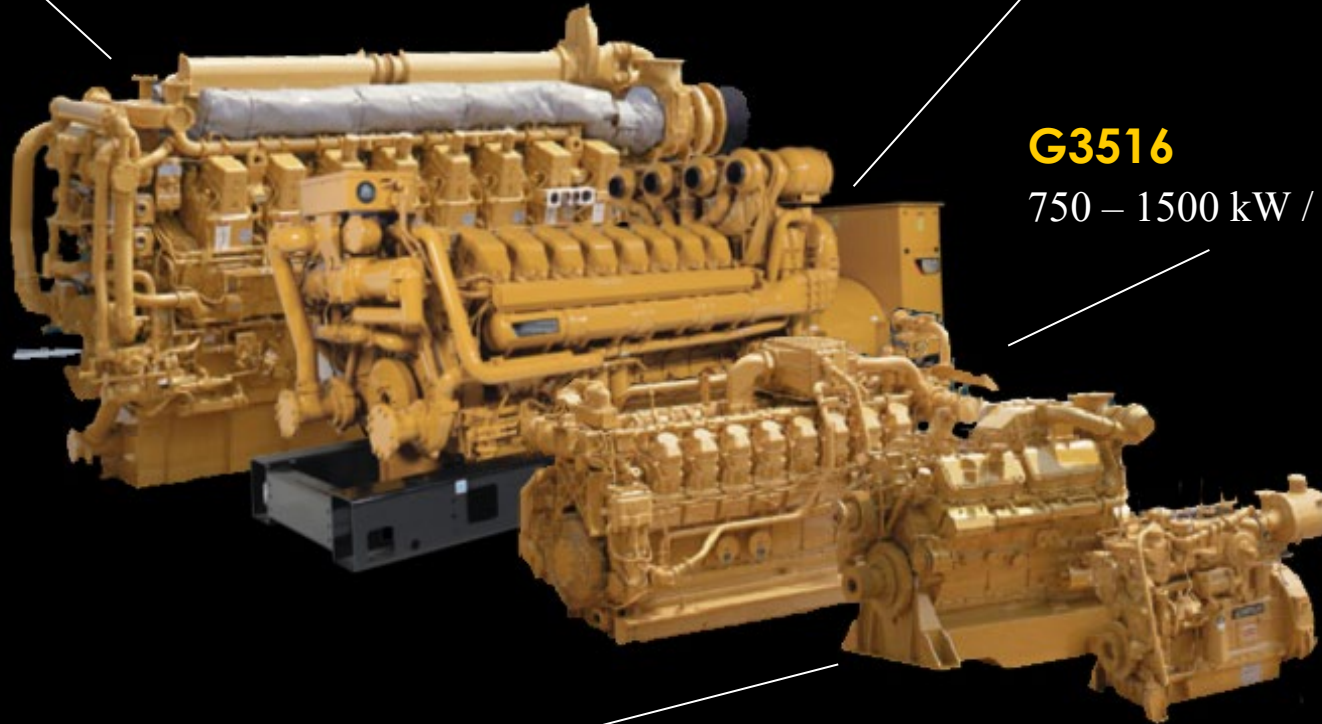
750 – 1500 kW / 600 – 2224 Hp

G3412

350- 500 kW / 375 – 540 Hp

G3306

150 – 300 kW / 160 – 325 Hp







Me

LEC Sustainability Projects and Overview

- Landfill Free
- GHG Reduction w/Wood Auger Installation
- Wastewater and Spent Coolant Evaporation
- Solvent Reclamation
- Boneyard Reclamation Activities
- Purdue Graduate Program – Sustainability
- VOC Reduction – Paint Booth Project
- IDEM ESP and P2 – Hosting State Summer 2023

Solvent Reclamation

- Decrease solvent related Hazardous Waste
- Decrease carbon footprint by eliminating hazardous waste disposal trucks
- Eliminate risk by taking hazardous waste off the road
- Cost Savings



Process

Clean Solvent Out



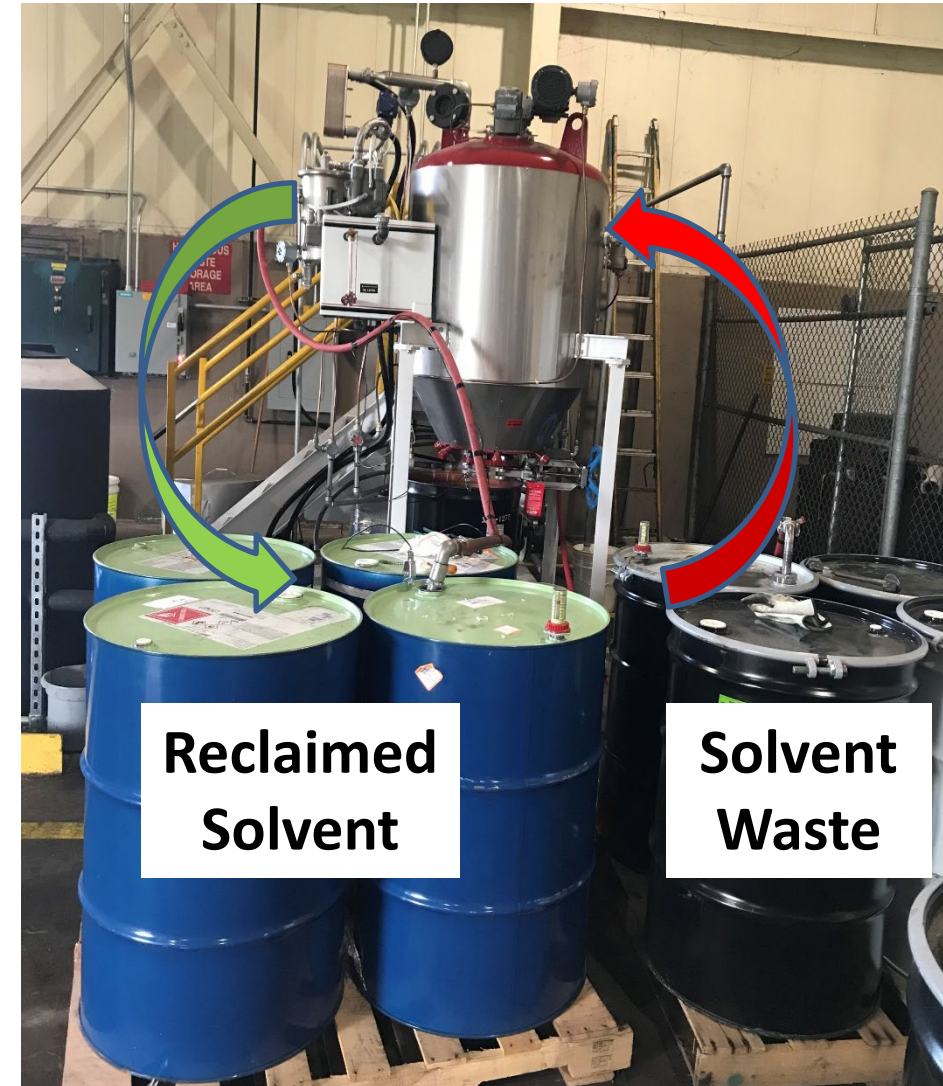
**Reclaimed
Solvent**

**Solvent
Waste**

Dirty Solvent In

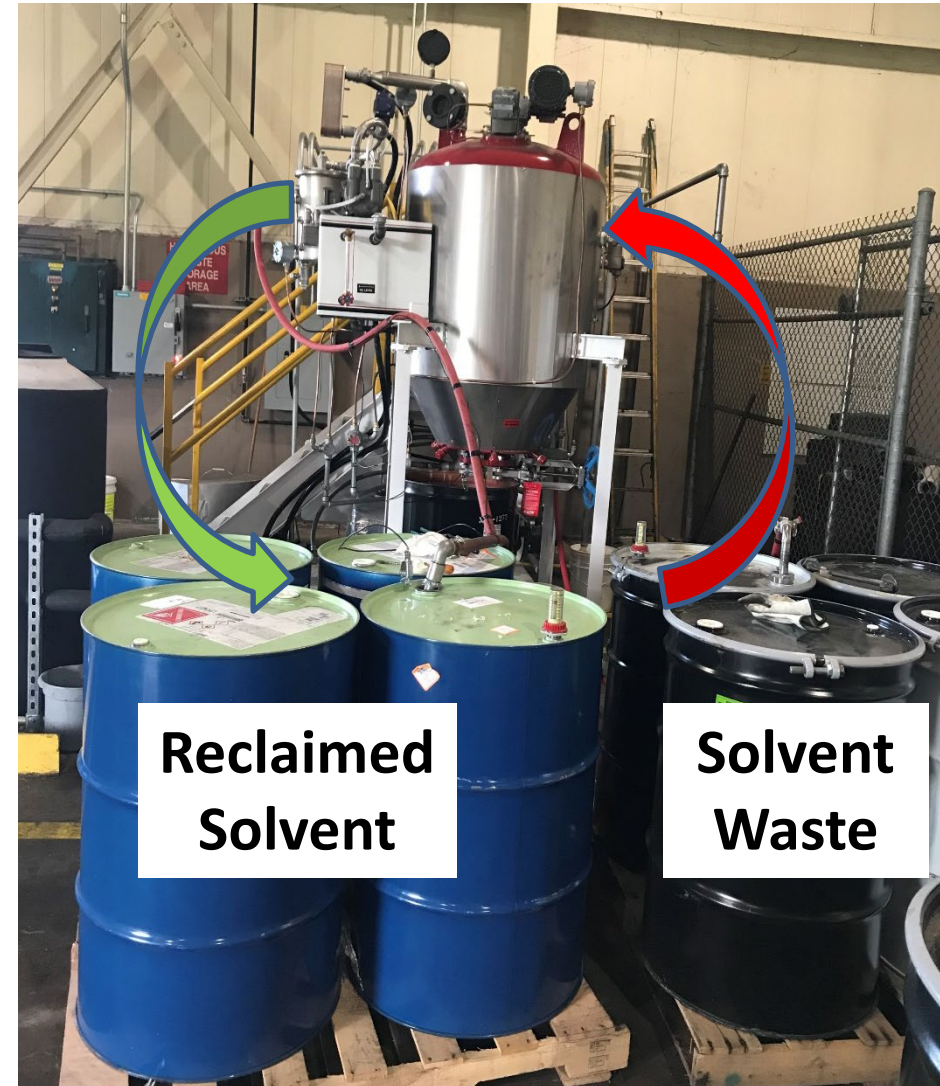
Process

1. Waste solvent is pumped into the 30 gallon vat
2. Solvent is heated inside the vat to a solvent specific temperature
3. Solvent evaporates out through plumbing at the top of the unit
4. Clean solvent is cooled, recondensed, and collected in the clean drums



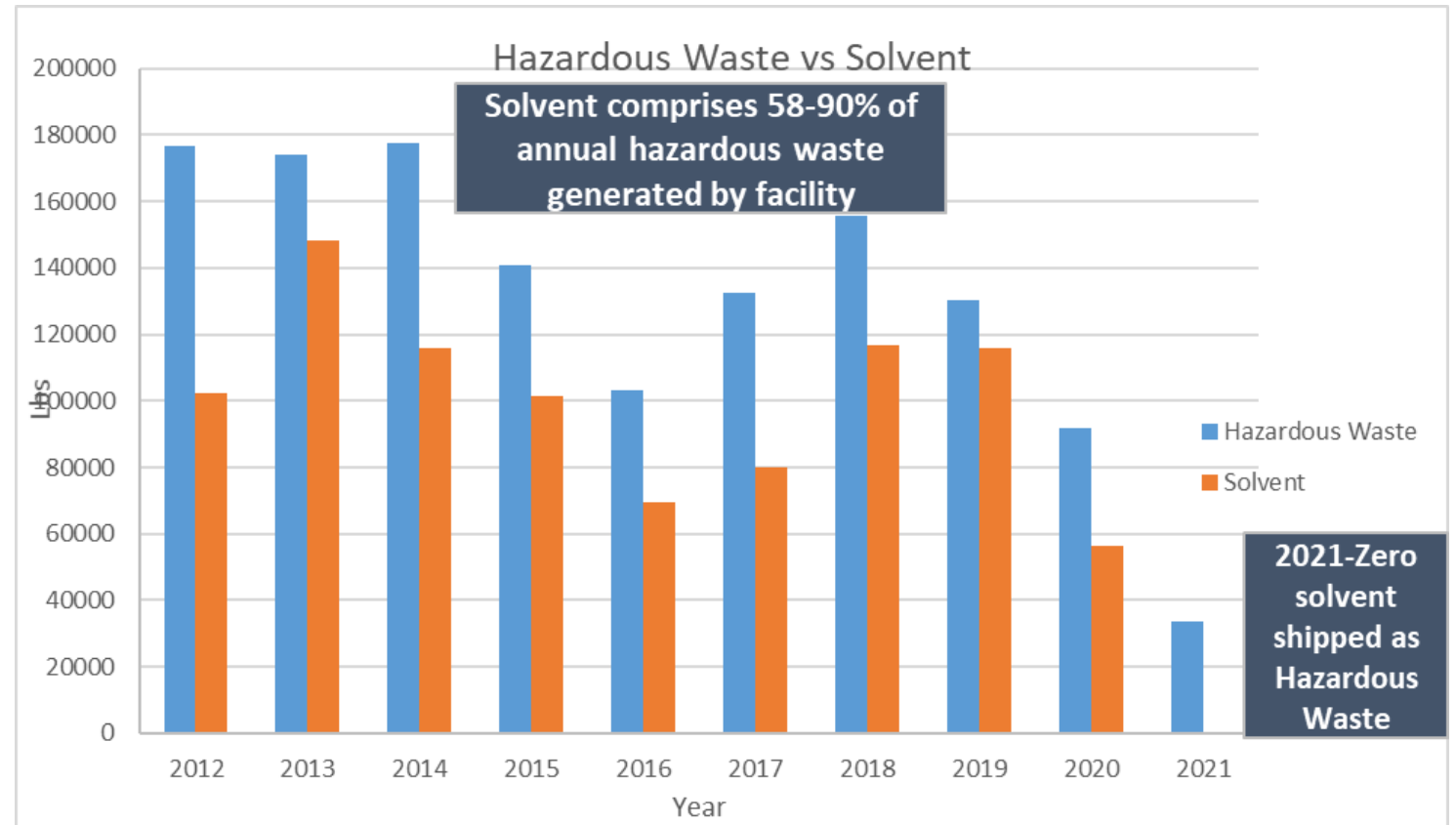
Other Details

- Still bottom may still be characterized as hazardous waste
- Vat is under a vacuum which lowers the temperature necessary to evaporate
- No direct heat to solvent. Vat is a double walled tank with heated oil running through a coil between the walls



Environmental Impact

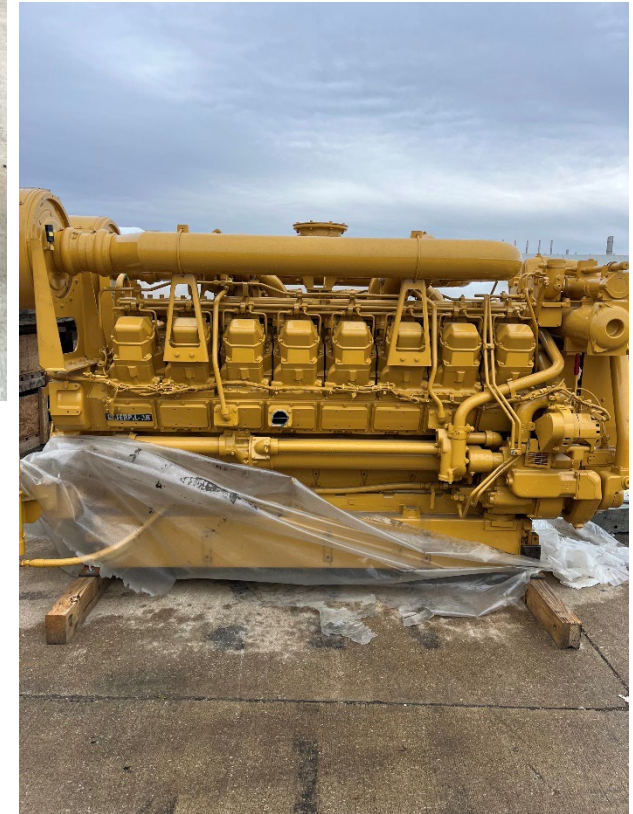
- Reduced Hazardous waste by 76%
- Zero solvent shipped for reclamation in 2021
- 5.95 MTCO2 GHG Reduction



Boneyard Reclamation

- Finding new homes for boneyard scrap using existing Caterpillar customers
- 33 tons of material reused in 2022

\$\$ 40x the return over scrap value \$\$



LARGE POWER SYSTEMS DIVISION

CATERPILLAR[®]

Wood Auger

- **Reduce wood loads shipped from plant to recycler**
 - Historically shipped 4 x 40yd roll-offs of wood per day
 - Purchased auger to increase density of load
 - Load size increased from 1-2 tons to 8-10 tons
 - Reduced from 20 loads per week to 2-3 loads per week
 - 98.79 metric ton reduction in GHGs per year
 - **ROI - 7 Months**

Previous Method



Current Method



LARGE POWER SYSTEMS DIVISION

CATERPILLAR®

Scrap Wood Program

Did you know LEC has a scrap wood program?

Take home crates for home projects!

Upcycle!



See EH&S or Security for details.



If you have questions, please contact Justin Koehler at extension 5510.

LARGE POWER SYSTEMS DIVISION



Caterpillar: Confidential Green

Win the Right Way

VALUES + ETHICS + COMPLIANCE

– Our reputation is built not only on what we achieve, but how we achieve it

codeofconduct.cat.com