

## Biodiesel Production Facility



## Viridis Fuels, LLC

1241 High Street  
Oakland, CA 94601  
USA  
[www.viridisfuels.com](http://www.viridisfuels.com)

# What is Biodiesel?

---

## Biodiesel

- ◆ Renewable, clean-burning diesel fuel from organically-sourced oil, grease & fat
- ◆ First & only EPA-designated, commercial-scale-produced advanced Biofuel
- ◆ Perfect substitute for petroleum-based diesel fuel

# What is Biodiesel Made From?

## ◆ Feedstock

- ✓ Inedible animal fats (tallow)
- ✓ Used greases & oils
- ✓ Purpose grown crops
- ✓ Algae



## ◆ Non-competition with food supply



# Diesel Truck Impacts

## Annual California Health Damages From Current Vehicle Fleet

- \$14.5 billion in annual health/societal damages
- 11,434 asthma attacks, lower resp. impacts
- 608 hospitalization and ER visits
- 571 premature deaths
- 548 heart attacks
- 53,353 lost school and work days

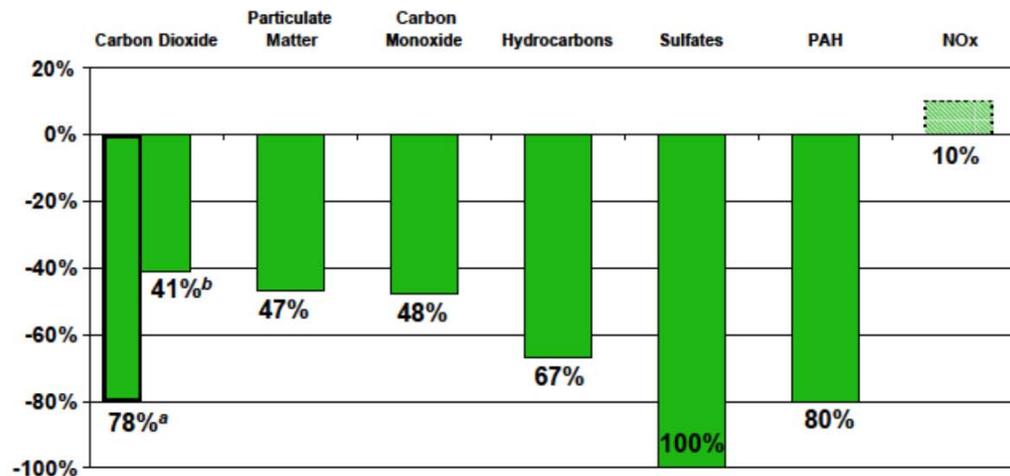


# Biodiesel Environmental & Health Benefits

---

- Cleaner fuel for existing diesel fleets
- Reduces GHGs by 50 - 80%.
- Prevents 664 premature deaths in CA from reduced PM2.5 exposure.
- Reduces Wastewater by 79%.
- Reduces Hazardous Waste by 96%.

# Biodiesel Environmental & Health Benefits



Relative to petroleum diesel, biodiesel reduces harmful emissions associated with smog, cancer causing compounds, and respiratory illness

## Biodiesel Performance Benefits

---

- Renewable fuel produced from a variety of fats of oils that is compatible with diesel engines and infrastructure
- Improved lubricity contributes to reduced maintenance costs
- Diesel engines are 20 - 30% more efficient than gasoline engines

# Biodiesel Economic & Security Benefits

---

- Can be produced domestically and generate significant economic benefits
  - Jobs
  - Revenues
  - Taxes
- Diversifies fuel supply which increases national energy security

# Project Overview

## Develop/operate 20 million annual gallons biodiesel plant

- ◆ ASTM Standard, commercial grade, 100% biodiesel
- ◆ 4 million gallons glycerin: **Co-product by 10% of biodiesel production**
- ◆ Long term lease in ideal location
  - ✓ Environmentally approved site
  - ✓ Foot of new SF Bay Bridge
- ◆ Multiple community, social & environmental benefits
  - ✓ Job creation – Special job programs
  - ✓ Air quality improvement
- ◆ Strong political & public support
  - ✓ Elected officials
  - ✓ Local community
  - ✓ Environmental activists

# Location & Site Characteristics

- ◆ CEQA approved
  - ✓ Biggest environmental hurdle done
- ◆ Rail access
  - ✓ Supports rail into site
- ◆ At hub of Bay Area rail, highway and freight infrastructure
  - ✓ All come together at his location
- ◆ Adjacent to Port of Oakland
  - ✓ 5<sup>th</sup> busiest container port in US



# Jobs for the Community

- ◆ Permanent new jobs with benefits
  - ✓ Many entry level and union
- ◆ Challenged populations employment program
  - ✓ Jobs for local residents through Hire West Oakland First
    - Partnership w/ West Oakland job training & placement programs
  - ✓ Collaboration with Alameda County Probation to hire parolees
    - Potential employee recommendations & screening
    - Housing allowance program to support sustainable employment
  - ✓ Collaboration with Alameda County Social Services to hire former CalWORKS moms who lost benefits
    - Child care stipend to support sustainable employment
  - ✓ Soft job skills training

# Partnerships with Labor

---

- ◆ Built with Union Labor
  - ✓ Community Benefits Agreement Signed with Alameda County Building Trades
- ◆ Operated with Union Labor

# Contact

---

Kathy Neal  
[kneal@viridisfuels.com](mailto:kneal@viridisfuels.com)

Mario Juarez  
[mjuarez@viridisfuels.com](mailto:mjuarez@viridisfuels.com)

VIRIDIS FUELS  
1241 High Street  
Oakland, CA 94601  
[www.viridisfuels.com](http://www.viridisfuels.com)