

# The Biodiesel Alternative

## Denton, Texas



# Environmental Compliance

- Landfill Gas Control
  - New Source Performance Standards
  - Engineering Guidelines
- Clean Air Act Amendments
  - Established Air Quality Standards
- Energy Policy Act
  - Mandates Alternative Fueled Vehicles
  - 2010 Compliance Date

# Energy Act

## Cost of Compliance-Vehicles

- Fleet Retrofit or Replacement
  - Diesel Truck Retrofit w/Catalytic Converter
    - Conversion Cost per Unit \$20,000
    - Estimated One Time Conversion Cost \$880,000
  - Diesel Engine Replacement to meet Tier III
    - Engine Cost per Unit \$30,000
    - Estimated One Time Conversion Cost \$210,000
  - Equipment Replacement w/Compliant Units
    - Equipment Cost per Unit \$130,000
    - Estimated Total Cost \$1,170,000
- Total Cost of Vehicle Compliance \$2,260,000

# Beneficial LFG Use

- LFG Energy Source for Biodiesel Plant
- LFG Fires Co-Generation Unit
  - Producing Hot Water for Biodiesel Plant
  - Electricity for Biodiesel & Scale House
- DTE LFG Customer

# Biodiesel Proposal

- Equipment Purchase Agreement
- Lease-Back Provision in Agreement
- BDI Owns and Operates Plant
- City Represented on Board
- City Biodiesel Purchase Commitment
- City Provides Plant Property

# Biodiesel Production

- Three Million Gallon per Year (initial)
- Utilizing Recycled Cooking Oil & Virgin Oils
- Local Production of Alternative Fuel
- Guarantee of 300,000 gal/yr for City

# Benefits of Biodiesel

- Meet the Alternative Fuel Requirements
- Improved Engine Operation & Life
- Fuel Price Stability
- Provides for Cooking Oil Recycling
- Reduces Sewer Clogs from Grease

# Biodiesel Advantages For Vehicle Fleet

- No vehicle alterations.
- No infrastructure changes.
- No specialized training for mechanics or drivers.
- No additional parts for inventory.
- No concern with engine warranties.

# Community Benefits

- Air Emission Reductions (LF & Fleet)
- Example to Region

(Be A Leader Among Cities)

- Cost Effective Alternative (LFG & Fuel)
- Environmentally Friendly Solution

# Questions?

