

New York City Department of Sanitation

John J. Doherty, Commissioner



National Biodiesel Conference & Expo 2008



Mission

- Provide essential services to New York City
- Implement the best available technologies
- Maintain a vigilant and environmentally responsible "Clean Fleet Program"

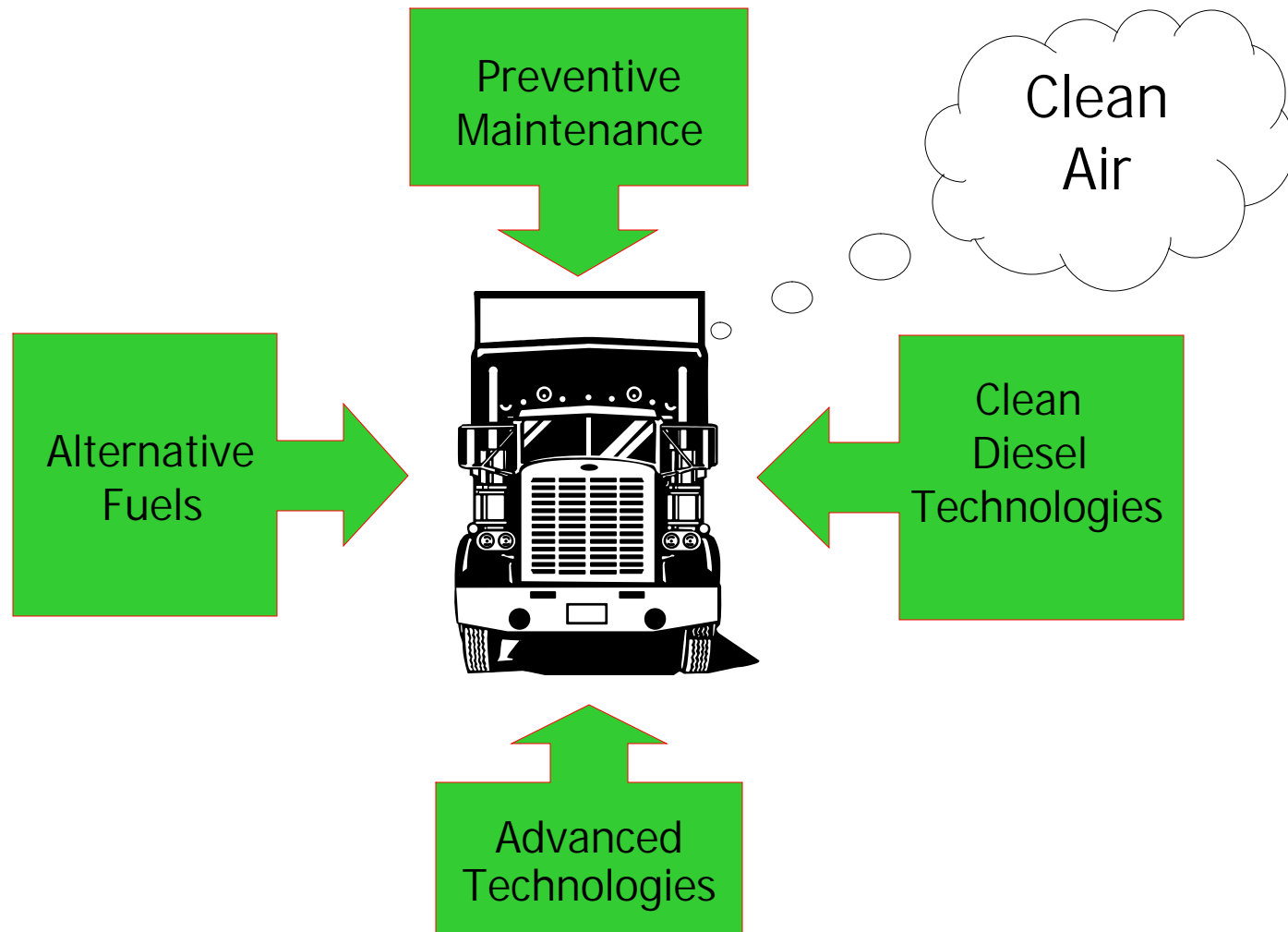


Fleet Profile

- 5,500 vehicles
- 2,042 collection / recycling trucks
- 450 street sweepers
- Light, medium & heavy-duty
- Off-road (Front End Loaders, Skid Steers, Excavators, Back Hoes, etc.)



Strategies





BIODIESEL EXPERIENCE

Joined the growing number of fleets
using biodiesel in
August 2006



Why Biodiesel?

- Renewable
- Safe to handle
- Domestically available
- Transparent to the operation
- Step forward – Towards energy security





Why Biodiesel?

- Lubricity enhancer (even at 1%)
- Nontoxic & biodegradable
- Reduces tailpipe emissions
- Can be used in most diesel engines
- Does not require special infrastructure



In The News

"Truckers Lean Toward Bio-Based Fuel"
October 03, 2007

WASHINGTON – The U.S Environmental Protection Agency (EPA) is implementing a new "Grow and Go" program in attempts to educate the trucking industry about the benefits of using biodiesel fuel, FarmWeek reports.

The EPA believes that biodiesel use in the trucking industry will increase due in part to the growing demand for "green shippers" and an expanded federal initiative.

The majority of trucking contractors use a five- or 20-percent blend of biodiesel fuel. However, some trucking companies, such as State Logistics, a California-based company that finds biodiesel transportation for companies that are environmentally conscious, have purchased trucks that run on B-99 (99-percent biodiesel).



How Did We Start?

- B5 Pilot
- Soy + ULSD (< 15 ppm)
- South Bronx
- One district location (Bx-2)
- Captive fleet (approx 40 vehicles)
- Label pumps
- Informed operators & mechanics



B5 Pilot

- 7 month trial (Aug-06 to Feb-07)
- Performed fuel analysis
- Replaced vehicle fuel filters (before pilot)
- Replaced dispenser fuel filters (before pilot)
- Inspected all fuel filters
- Monitored district down status
- Interviewed mechanics
- Interviewed operators



B5 Pilot – Results?

- No change in vehicle performance
- No operator complaints
- No mechanic complaints
- No increase in down rate
- Good winter operability
- Positive experience



B5 – Implementation

- Citywide in March 2007
- All diesel vehicles/engines (CAT, Cummins, DDC, International, Mack, MB)
- Vehicles equipped w/exhaust after-treatment (DOC, FTF, DPF, SCR)
- Over 4 million gallons to date



B20 - Pilot

- August 2007
- One Queens district location
- Captive fleet (approx 40 vehicles)
- Over 30,000 gallons to date
- Testing is on-going
- Gaining acceptance, but not approved by all engine manufacturers



B20 – Concerns

- Long-term storage (> 6 months)
- Hydroscopic (absorbs moisture)
- Poor cold weather properties
- Strong solvent properties (cleans)

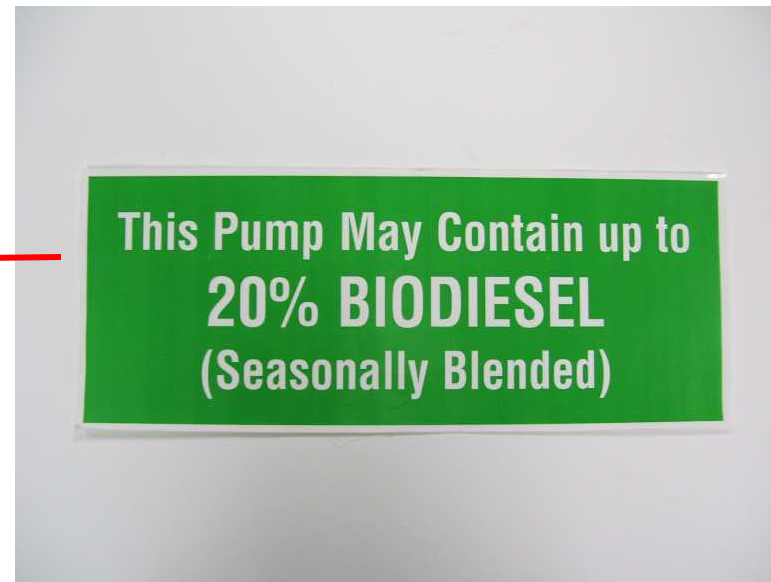


B20 Storage Tank





Pump Label





Exhaust After-treatment





Bioheat

- One building
- Manhattan
- Above ground tank
- 4,000 gallon capacity



Other Agencies on Biodiesel

- NYC Department of Transportation (B5)
- NYC Parks & Recreation (B20 seasonally)



Best Practice

- Awareness (operators & mechanics)
- Preventive Maintenance (vehicle)
- Housekeeping (tanks & pumps)
- Long-term storage consideration (seasonal equipment)
- Climate considerations (winter time)
- Supply from BQ-9000 certified marketer



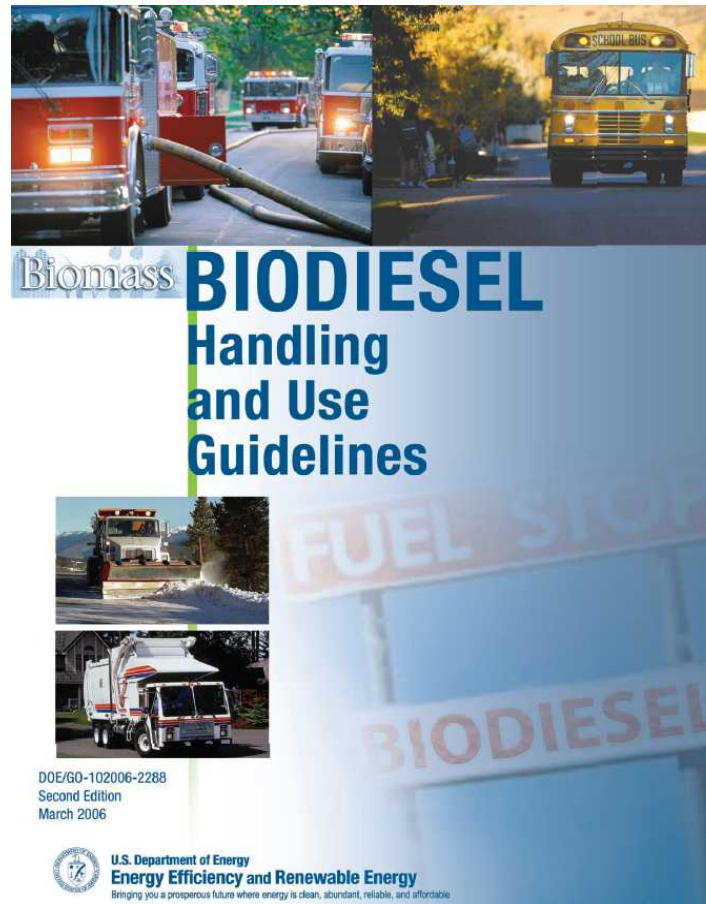
Future Outlook

- Possible B20 rollout citywide (Vehicles)
- Possible B20 rollout citywide (Buildings)

- Pending Testing & Cost



Biodiesel Handling Guide





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