



CITY OF KEENE & Biodiesel

Seven years of experience with B-20
Biodiesel in a City Fleet with no
problems !

BIODIESEL B-20 - THE REASONS:

- Runs in Existing, unmodified engines
- Integrates with existing fuel infrastructure
- Increases lubricity
- Cuts exhaust emissions, eliminates black smoke and odor – Just ask my mechanics!

Biodiesel – Keene NH

So in what engines do we
use B-20 ?

International

Case New Holland

Cat John Deere

Cummins Detroit

& Kohler

from a 1969 Ingram roller
to a 2007 Ford F450

Entire Fleet runs on
biodiesel



B-20 and its fuel characteristics

- No loss of power
- Increase in fuel mileage reports of 1 to 2 additional miles per gallon running B- 20
- With proper fuel additive no problems with gelling reported.
- Warranties are not voided despite all the rumors
- Manufacturers warranty their parts and workmanship
- not FUEL!

Health benefits

- Operators have stated that the headaches they would get from operating equipment with 100% diesel have gone away while operating equipment with B-20. In an air quality study done at the Keene transfer station the PM2.5 particulate matter was reduced by over 60% !
- Let's hear more.

Diesel Engines and Air Quality

Diesel engines - MAJOR environmental and public health concern

- Oxides of Nitrogen or NO_x;
- Fine particulate matter
- A complex mixture of **volatile chemicals**
(carcinogens or respiratory damaging agents)

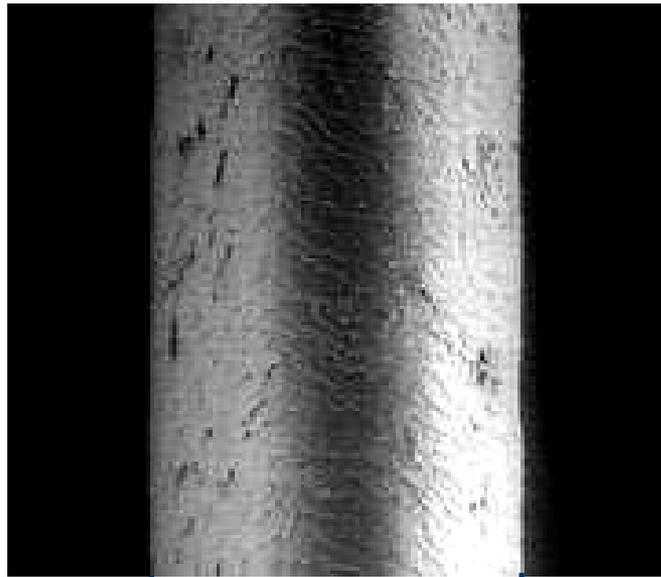


Downtown LA, 4/29/2004

Source: MSNBCmedia.msn.com

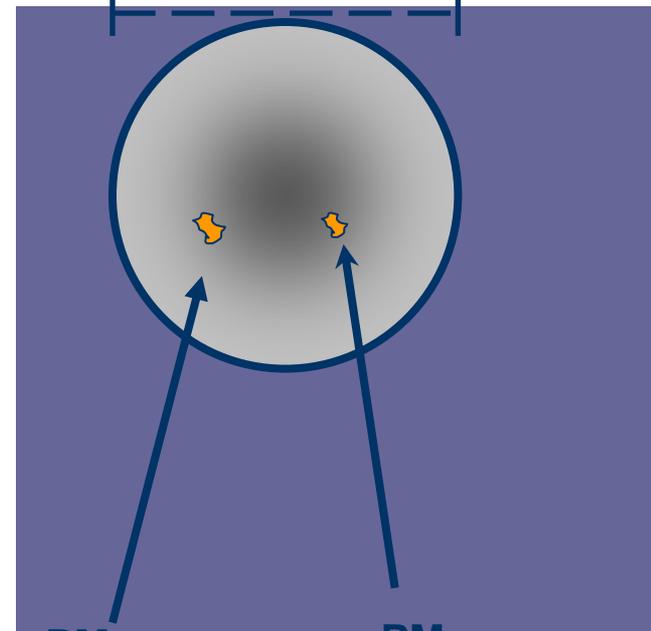
What are Fine Particles?

A complex mixture of extremely small solid particles and drops of liquid in the air



Human Hair (45 - 130 μm diameter)

Hair cross section ($\sim 70 \mu\text{m}$)

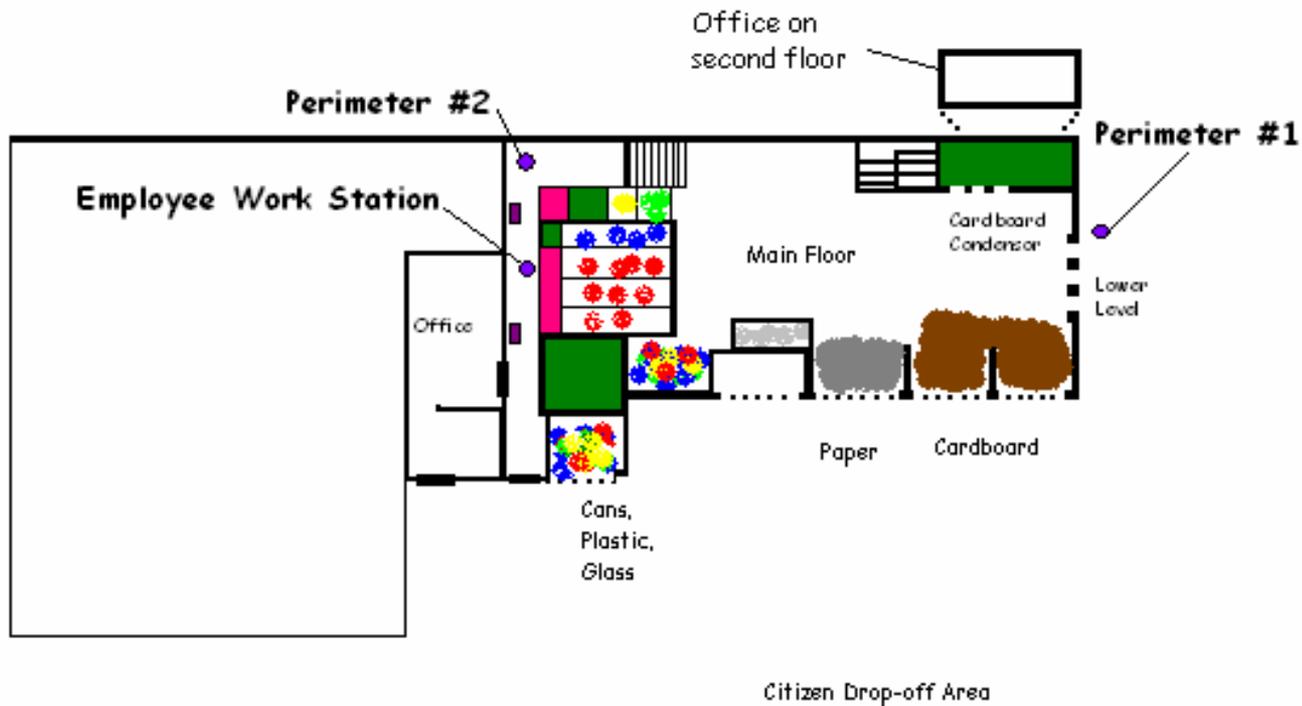


PM_4
($4 \mu\text{m}$)

$\text{PM}_{2.5}$
($2.5 \mu\text{m}$)



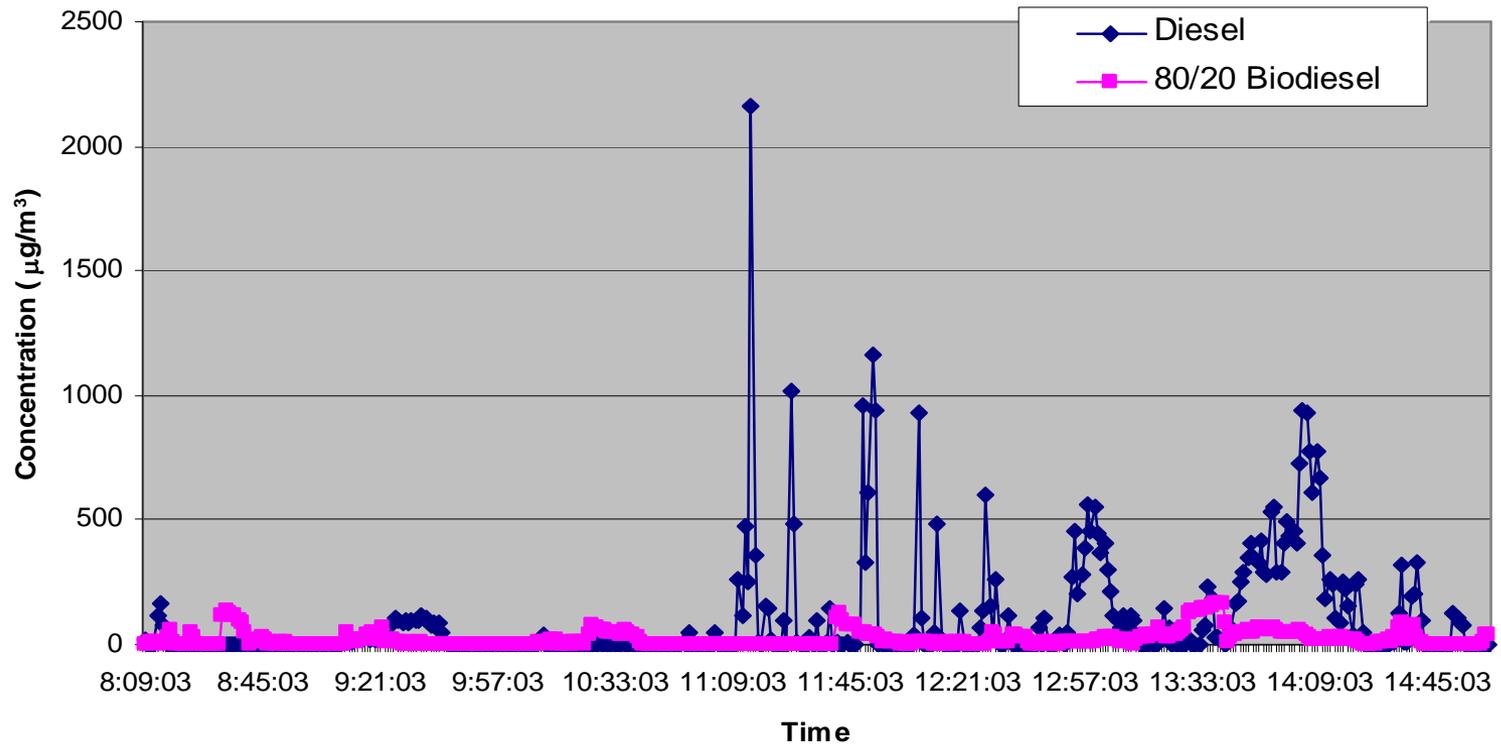
City of Keene Recycling Center



MUNICIPAL FACILITY

Health effects-Study at Keene RC

Perimeter #1, PM_{2.5} Concentrations, Keene Recycling Center



Biodiesel and the environment.

- Are we really helping the environment?
- Use of Biodiesel in the Cities 68 trucks and equipment means 417 tons of CO₂ is eliminated each year it is used.

BIODIESEL IN KEENE

- It is working and Keene has cleaner air because of it.
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