




MediDock Anti-idling Kiosks

Telematics for monitoring & altering
idling behavior



Recent Idle Reduction Projects Implemented in NW IN

Deb Backhus South Shore Clean Cities & Legacy
Environmental Services



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AIR QUALITY IMPROVEMENTS AT EMERGENCY ROOM ENTRY BAYS

Reducing
Emissions from
Ambulances at
Hospitals

THE PROBLEM – diesel emissions from ambulances idling during patient drop off

POTENTIAL SOLUTION – MediDock anti-idling technology for ambulances



MediDock Idle Reduction Kiosks will reduce exposure of infirmed patients (a sensitive population) and hospital personnel to diesel fumes during Emergency Room drop off and pick up

Ambulance Idling & Critical Functions

If the ambient temperatures are greater than 86 degrees, or below freezing the ambulances typically idle while completing paperwork, or during their stay at the hospital. This usually results in about 45 minutes or more of idling while parked at the hospital.

Idling is used to maintain the temperature inside the ambulance between 40 and 85 degrees. This is to keep drugs from becoming unusable due to temperature extremes.

Idling keeps medical equipment such as suction machines, EKG monitors, ventilators, IV warmers and refrigerator charged or plugged in.

Idling provide electrical power to keep the engines batteries at maximum capability for immediate starting.



MediDock Functions to Enable Idle Reduction



Kiosks provide a power source for emergency vehicles battery operated systems to maintain critical functions with their engines turned off

Duct connection keeps the vehicle warm in winter and cool in summer to maintain a stable interior environment

External kiosk power source maintains continual operation of all necessary equipment



SEVEN MEDIDOCK KIOSKS INSTALLED

Anticipated
Benefits

Will aid in reducing
idling during 21,000
ambulance drop off per
year across

> 1700 gallons/yr fuel
savings anticipated

Diesel Emission
Reductions



FOUR MEDIDOCK KIOSKS INSTALLED

Anticipated
Benefits

Will aid in reducing
idling during ~ 19,000
ambulance drop off per
year across

> 1600 gallons/yr fuel
savings anticipated

Diesel Emission
Reductions



TWO MEDIDOCK KIOSKS INSTALLED 2 – 3 IN PROCESS

Anticipated
Benefits

Will aid in reducing
idling during > 21,000
ambulance drop off per
year across

> 1900 gallons/yr fuel
savings anticipated

Diesel Emission
Reductions



**BEYOND THE PUBLIC HEALTH AND
EMISSION REDUCTION BENEFITS**

**Making a
difference at
Lake County
Hospitals**

**ONCE THESE FOUR PROJECTS ARE
IMPLEMENTED**

**LAKE COUNTY WILL HOLD THE
DISTINCTION OF HAVING MORE
MEDIDOCKS THAN ANY OTHER
COUNTY IN THE USA!!!**



Anti-idling
technology

RESULT –

NO tailpipe emissions during post
patient drop off as the engine can be
shut off

Improved air quality for
patients/sensitive populations and staff

Noise reduction

Fuel savings



Reducing Emissions from School Buses



THE PROBLEM – diesel emissions from school buses in the vicinity of school children

THE SOLUTIONS –

Fuel reduction and resulting emission and cost reductions via monitoring idling and optimizing routes using **telematics**

Emission reduction during colder months using **bus heaters** instead of extensive idling to warm up buses

Telematics & Bus Heaters, to reduce diesel emission exposure to school children (sensitive populations)

IDLE REDUCTION OPTIONS: TELEMATICS

Telematics inform manager about detailed trip history

Inform and
modify
behavior
through
Telematics

Idling is not reduced,
but this tool targets instances where idling
occurs

GPS

- Enables route planning to minimize wasted time

Engine Control Module

- Can transmit information about trip history that identifies idling behavior



EXAMPLE PROJECTS AND BENEFITS - TELEMATICS

Idle and Fuel Reduction Technologies

An orange circle with a gradient, containing the text 'Telematics: tracking to reduce idling and fuel consumption'.

**Telematics:
tracking to
reduce idling
and fuel
consumption**

Sacramento, CA

400 vehicles outfitted with electronic fleet management products to

- ☐ optimizes vehicle routes
- ☐ monitors vehicle performance,
- ☐ identify opportunities for improvements in driver behavior
- ☐ streamline the pre- and post-trip inspection process

Savings based on a sample of 184 vehicles indicates savings in excess of \$60,000 a month in fuel costs alone

Telematics system paid for itself in just two months!

contact
information



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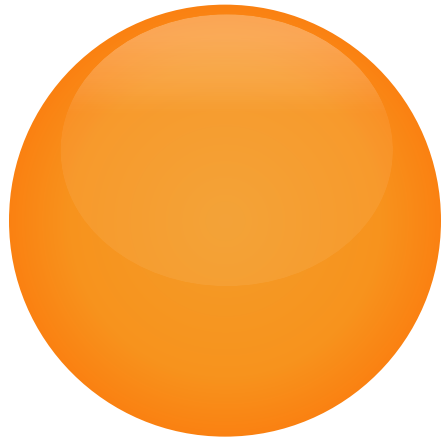
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