Best Practices for Reporting & Verification from Mobile Combustion

California Climate Action Registry Member's Meeting

October 7, 2008

Safeway's Sustainability Initiative

- Developed a Greenhouse Gas Initiative
  - Partnership with State, Federal & commercial entities
    - Environmental Protection Agency (EPA)
    - Chicago Climate Exchange
    - California Climate Action Registry
- Committed to reducing greenhouse gas emissions – reducing Safeway's carbon footprint
- Wind & Solar Projects

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ACTION
Registry

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™
www.climateregistry.org

SAFEWAY is going SOLAR!

Mobile Emissions

- Combustion of fuel from:
  - Safeway owned fleet
    - 1,133 Tractors
    - 3,594 Reefer Trailers
  - Safeway.com
    - 123 stores
    - 6 divisions
    - 422 trucks

Benefits of On Board Computers

- Captures data from engine:
  - MPG
  - Miles Traveled
  - RPM
  - Tork Ranges
  - Idle Time
- Track performance through MPG
- Stay within right RPM
- Challenge each facility against each other
- Fleet operations receive bonus based on Idle report
- Vehicles and drivers are tracked
  - Report cards are created
  - Can record every minute
  - Performance chart

SAFEWAY
Ingredients for life.
637B
SAFEWAY
TRACY, CA

Operations profile

XATANET

Operation Profile by Organization Report

From: Sun 09/14/08 12:00a PT

Through: Sat 09/20/08 11:59p PT

Organization: NorCal

Vehicle Type: Electronic Only

Speed Range	Total Miles	Total Gallons	% of Miles	Fleet Std	% of Gal	Fleet Std	MPG	Fleet Std	Cruise On %	Fleet Std	Cruise MPG	Fleet Std	Engine Work%	Fleet Std	Engine Coast%	Fleet Std	Brakes / Mile	Fleet Std	Torque Band % Low	Torque Band % High	Torque Band % Good
0 - 5	1.6	0.8	0.2	0.0	0.7	0.1	2.0	2.5	0.0	0.0	0.0	0.0	12.5	34.6	87.5	65.4	68.8	53.4	93.4	0.0	6.6
6 - 35	59.2	16.2	8.4	1.1	14.7	2.0	3.7	3.9	0.0	0.1	0.0	2.1	57.3	60.3	42.7	39.7	5.9	4.8	48.4	2.2	49.3
36 - 48	70.4	14.6	10.0	1.3	13.2	1.8	4.8	4.8	0.3	1.6	2.0	3.0	66.6	70.2	33.4	29.8	2.1	1.5	25.1	3.0	71.9
49 - 53	101.2	16.0	14.4	1.2	14.5	1.7	6.3	5.0	11.5	6.8	7.4	3.8	81.6	76.8	18.4	23.2	0.6	0.6	0.4	0.0	99.6
54 - 58	366.7	49.1	52.2	6.9	44.5	6.4	7.5	7.3	32.4	53.6	7.0	7.0	85.7	87.1	14.3	12.9	0.3	0.2	0.0	0.7	99.3
59 - 63	92.5	10.9	13.2	4.5	9.9	3.3	8.5	9.2	14.5	51.1	11.1	9.7	74.7	82.7	25.3	17.3	0.4	0.2	0.0	0.5	99.5
64 - 68	5.1	1.0	0.7	0.3	0.9	0.3	5.1	8.0	45.4	20.4	4.6	8.3	76.5	80.9	23.5	19.1	0.4	0.3	0.0	0.0	100.0
69 - 73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.1	0.0	14.2	0.0	84.0	0.0	33.0	0.0	67.0	0.0	0.9	0.0	0.0	100.0
74 - 78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.2	0.0	0.0	0.0	13.9	0.0	86.1	0.0	1.9	0.0	0.0	100.0
79 - 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	66.7	0.0	0.0	0.0	0.0	100.0
Road	696.7	108.6	99.2	15.5	98.5	15.5	6.4	6.8	17.0	32.4	7.2	7.7	79.1	81.6	20.9	18.4	1.1	0.8			
Yard	5.4	1.7	0.8	84.5	1.5	84.5	3.2	3.3													
Total	702.1	110.3	100.0	100.0	100.0	100.0	6.4	6.7													

Section shows where trucks perform best for MPG

Section shows Optimum driving range of engine and how the drivers are working the trucks

Transportation Score Card
Idle Time

Track fuel - Fleet

- Tanker truck stationed at distribution center, used to re-fuel trucks
- TMT system used to track fuel
- Fuel pump meter monitors the fuel
- Driver enters fueling event into palm device
  - Fuel ticket #, scan truck barcode unit, odometer reading, gallons added
  - This operation continues 24 hours a day, 365 days a year.
  - Not necessary to fuel up at gas stations

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TRACY, CA
USDOT 138208
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80
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Dot.com Trucks

- No diesel refrigeration – Electric
- Plug truck in at 6:00 AM, unplug then compressors work on DC
- Contract with Wheels to maintain trucks
- Contract with Right Express for tracking of gallons used

Track Fuel – Dot.com

- Trucks are not centrally located
- Fuel card “Right Express” assigned to each delivery truck
- Drivers allowed one transaction per day on each card, $100 transaction limit
- Can only be purchased between hours of 7:00 AM to 10:00 PM, seven days a week
- Enter mileage into pump at every fill up
- Purchase alerts occur if transactions exceed $100 or 35 gallons, if purchased outside hours or if mid-grade or premium is purchased.

CARROT

- Enter in gallons consumed for dot.com

- Enter in diesel from fleet as separate entry
  Bio-diesel volumes adjusted down