

Lessons learned - so far!

Presentation

by Cindy Heil

Section Manager, Mobile Sources

**Alaska Department of
Environmental Conservation**

Background

- OBD advisory program
1/1/2000 - 7/1/2001
- Started failing for OBD 7/1/2001
- Discontinued tailpipe on 1996 and newer vehicles on 7/1/2001

Lesson 1 - PR

- Limited Public Awareness is OK (at least for small programs)
- Press Release
- NECVEC brochure at stations
- Letter sent to OBD vehicles whose registration is needing renewal
 - ◆ Informs them of change in program
 - ◆ Alaska OBD brochure
 - ◆ Encourages earlier testing

Lesson 1 - PR continued

- Alaska has had a successful startup of OBD program
- No political fallout - to date
- Only printing and mailing costs, mailing approximately 3,000 letters a month (no contracts/air time costs)
- Communicating with relevant audience
- Mail outs intended for only the first 2 years to match biennial program

Lesson 2 - training & equipment

- Get the best training you can afford
- Used Jerry Truglia with A.T.T.S. for a 40 hour train-the-trainer class
 - ◆ Trained all relevant state, municipal and borough staff
 - ◆ Trained IM technician trainers
 - ◆ cost effective, assisted with program buy-in
- Need to get good up-to-date scan tool for drivecycle and monitor analysis

Lesson 2 - training & equipment (continued)

- Make sure technicians understand monitor functions
- Make sure technicians understand the concept of monitor conflict (where one monitor won't run until another completes)
- Highly recommend acquisition of resource materials (e.g. Jendham, Inc. books) for OBDII systems and strategies.
- Provide as much support for your frontline people as you can

Lesson 3 - read guidance carefully

- Tested vehicles without key in KOER condition
- # of anomalies in data, especially in unsupported monitors
- Verified that you can get different results depending on position of key, can bypass OBD readiness system on some vehicles
- Now - RPM signal must be detected for test to continue

Lesson 3 - have tailpipe option

- For referee tests, software allows option of tailpipe test after OBD test
- Referees have override option for any portion of test (underhood, tailpipe or OBD)
- Difficulties setting readiness monitors
- Spot check OBD test in controlled environment

Lesson 4 - dual scans

- Have referees, contractors, or someone, conduct a dual OBD scan using different scan tools (analyzer/primary method with at least one other)
- Assists with acceptance testing of analyzer/method
- Conflict resolution right up front
- Get documentation from each method

Dual Scan Worksheet

Date _____ Software Version ____ Referee Case # _____

VIN _____

MIL On _____ MIL Off _____

DTC's Present

Scanned Readings

C = Completed

N/C = Not Completed

N/S = Not Supported

Misfire
Fuel
Comprehensive Component
Catalyst
Heated Catalyst
Evaporative
Secondary Air
Air Conditioning
Oxygen Sensor Heater
EGR

Lesson 4 - anomalies

- Problem: in small program very difficult to investigate anomalies
- Is the anomaly there because:
 - ◆ communication/interrogation problems
 - ◆ Testing condition
 - ◆ Vehicle
- AK solution: software modification to send pre-set condition with test result match to referee facility

Lesson 5 - get all the data

- Our current program, after readiness check, stops recording data if vehicle is aborted or failed for unset readiness. Therefore, MIL status, DTC's, etc. not recorded.
- Software modification due summer 02, will record all data then make pass/fail determination - so test record will be complete

Additional Lessons?

- You Bet!
- Software update will address a lot of our current issues, e.g. anomalies will get to referee facilities, but will we be able to answer the question(s)?
- Have we given ourselves enough flexibility?
- Are MY 2001 + going to throw us new curves?
- New communication protocols

For further information

Cindy Heil

907-269-7579

cheil@envircon.state.ak.us