

Large Spark Ignition (LSI) Engine Working Group Meeting

On May 19, 2004, Air Resources Board (ARB) staff conducted the fifth LSI working group conference call. A discussion of each agenda item follows:

Agenda item	Discussion
Review	<ul style="list-style-type: none"> Staff reviewed the two proposed LSI measures and rulemaking timeframe
TPD Target	<ul style="list-style-type: none"> 6 Tons per day NOx in South Coast Air Basin A total of 12 tons per day NOx State-wide Dates: driven by need to get benefit by certain dates - and still give lead time that is needed to develop the engines 1 gram standard possible to meet with current technology with increased cost Can get target if 100% compliance of ALL LSI
Regulatory Concepts	<ul style="list-style-type: none"> Discussed 3 different possible regulation concepts. <ol style="list-style-type: none"> Manufacturer Lower Emission Standard Electric Forklift Requirement Fleet Average Requirement
New Engine Testing	<ul style="list-style-type: none"> HC + NOx can be lowered at expense of CO Drivability will not be affected by 1g standard according to SWRI Less room for deterioration at 1 gram standard but feasible with technical advancements Less than 1 Liter LSI – is regulated under class 2 small off-road equipment >25HP New engines will pay for themselves in fuel savings - need to keep system calibrated as in the past
Fuel Quality	<ul style="list-style-type: none"> Fuel quality from refineries generally good, contamination often occurring downstream in marketing ARB should enforce LPG rule already on books PERC testing program should provide answers later this year
Zero/near zero Emission vehicles	<ul style="list-style-type: none"> ARB to post upstream emission inventory for forklifts to working group ARB to give web-site link current off-road emission inventory Zero Emission vehicles always a goal Could we require demo equipment (fuel cell?) for possible credit We do have examples of where we have done this (Transit bus Program, and ZEV program)
Workshop	<ul style="list-style-type: none"> We would rank the Regulatory Concepts at the Workshop: least to best (for rough calculations of emission benefits) ARB is working up different concepts that include % reduction from fleets and still promote the use of electric forklifts To have 2 sessions: Concepts and Retrofit Protocol
Retrofit Verification	<ul style="list-style-type: none"> Draft Retrofit Verification Protocol to be posted on web-site May 21

