

AGENDA ITEM 94-7-1

NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE EMISSION CONTROL REGULATIONS FOR 1995 AND LATER MODEL UTILITY AND LAWN AND GARDEN EQUIPMENT ENGINES.

Copies of the slide presentation which supported the Air Resources Board's oral staff presentation given by Mr. Haste.

Attachments

Air Resources Board

PROPOSED AMENDMENTS
TO THE UTILITY ENGINE
EMISSION CONTROL REGULATIONS

July 1994
Sacramento, California

California Environmental Protection Agency

 Air Resources Board

PRESENTATION TOPICS

- Background
- Certification Status
- Proposed Amendments
- Impacts / Issues
- Summary / Recommendation

CALIFORNIA CLEAN AIR ACT

Mandates Emission Control Requirements for

- Utility Engines
 - Locomotives
 - Marine Vessels
 - Off-Highway Vehicles
 - Off-Highway Motorcycles
 - Construction & Farm Equipment
-

CBE vs. DEUKMEJIAN COURT ORDER

- BAAQMD 1982 SIP Measure To Ban Replaceable 2-Stroke Was Not Implemented
- CBE Filed Suit
- Court Ordered:
Regulations By January 7, 1991
Implementation By January 7, 1994

EXAMPLES OF UTILITY EQUIPMENT

(under 25 horsepower)

Handheld

Chainsaws
Leaf Blowers
String Trimmers

Non-Handheld

Walk Behind Mowers
Lawn Tractors
Generators

NATIONAL PERSPECTIVE

- 1990 Federal Clean Air Act Amendments Preempt <175 HP Farm and Construction Engines from ARB Control
- Preemption Consensus Between ARB & Manufacturers Reached on July 20, 1993
- Federal Rule Signed July 1, 1994
- California Standards Delayed from 1994 to 1995 by Board Action
- U.S. EPA has Proposed Regulations Similar to California

California Environmental Protection Agency

 Air Resources Board

1995-98 TIER I STANDARDS

NON-HANDHELD	HC+NOx	CO	PM (Diesel)
--------------	--------	----	-------------

< 225 cc	12.0	300	0.9
----------	------	-----	-----

= > 225 cc	10.0	300	0.9
------------	------	-----	-----

HANDHELD	HC	CO	NOx
----------	----	----	-----

< 20 cc	220	600	4.0
---------	-----	-----	-----

= > 20 cc; < 50 cc	180	600	4.0
--------------------	-----	-----	-----

= > 50 cc	120	300	4.0
-----------	-----	-----	-----

(grams per brake-horsepower hour)

California Environmental Protection Agency

 Air Resources Board

1999 & LATER TIER II STANDARDS

Non-Handheld	HC+NOx	CO		PM (2-St/Diesel)
All Engines	3.2	100		0.25

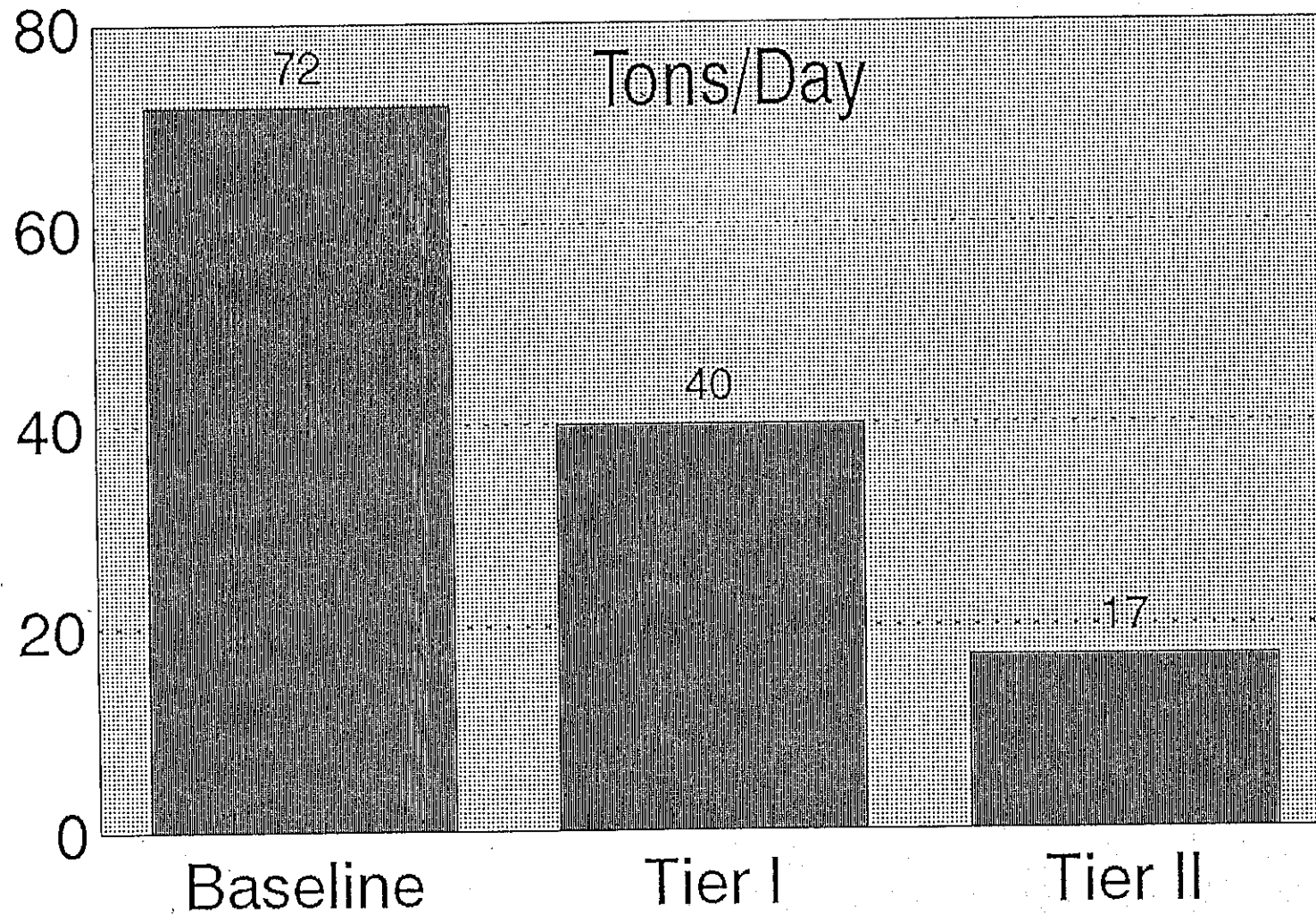
Handheld	HC	CO	NOx	PM (2-St/Diesel)
All Engines	50	130	4.0	0.25

(grams per brake-horsepower hour)

California Environmental Protection Agency

 Air Resources Board

STATEWIDE EMISSIONS HC+NOx



HOW ARE THE STANDARDS ENFORCED?

- Assembly-Line Quality-Audit Testing
- New Engine Compliance Testing
- Emission Control System Labeling
- Defects Warranty

MANY 1995 ENGINE MODELS ARE BEING CERTIFIED NOW

Engine Types Currently Certified or Under Review

**Equipment
Type**

**Total Number
of Models**

Handheld

28

Non-Handheld

80

ARB

California Environmental Protection Agency



Air Resources Board

NON-HANDHELD EQUIPMENT AVAILABILITY

Equipment Type	Number of Engine Models	
	< 225cc	≥ 225cc
Mower	4	6
Riding Mower		11
Generator	10	36
Lawn Tractor		20
Pressure Washer	3	4
Tillers	1	1
Sweepers		2
Blower		2
Snow Thrower		2
Misc.	3	14
Total	21	98

HANDHELD EQUIPMENT AVAILABILITY

Equipment Type	Number of Engine Models		
	< 20cc	Engine Size 20cc < 50cc	≥ 50cc
Edger		3	
Blower (Leaf)		8	
Line Trimmer		12	
Chainsaws		6	
Brush Cutter	1	12	
Total	1	41	0

RATIONALE FOR THE CLEAN-UP OF THE REGULATIONS

- Improve the Flexibility & Lower the Cost of the Regulations by:

Utilizing the Most Contemporary Test Methods
Streamlining Certification & Compliance Processes

- Achieve Consistency With Proposed Federal Regulations
-

PROPOSED AMENDMENTS

- Use the Recently Revised Test Procedure
- Provide HC Standard for Natural Gas Engines
- Allow Certification Using Phase II Gasoline
- Streamline Diesel Engine Certification by Specifying Groupings

PROPOSED AMENDMENTS

(cont)

Clarify:

- Labeling/Warranty Requirements
 - New Engine Audit/Compliance
 - Engine & Equipment Manufacturers' Responsibilities
 - Tamper Resistance Provisions
 - Utility Engine Definitions
-

ISSUES OF CONTROVERSY

- Definition of Handheld Equipment
- Manufacturers' Responsibilities
- CO Standard Stringency
- Additional Leadtime
- Averaging / Banking

IMPACTS OF PROPOSED CHANGES

- Maintaining Emission Reductions of Existing Regulations
- Provides More Flexibility, Lower Cost
- Alignment with Proposed Federal Rule

SUMMARY/RECOMMENDATION

- Minor Changes To Update & Clarify Test Procedures & Enforcement Requirements are Proposed
- The Proposed Amendments Ease Certification & Clarify the Requirements
- No Adverse Environmental Impacts
- Staff Recommends Adoption of Noticed Proposal