California Air Resources Board



Reducing Emissions from On-Road Heavy-Duty Diesel Trucks Dedicated to Goods Movement at California Ports

> Public Workgroup Meeting January 9, 2007

Air Resources Board



California Environmental Protection Agency

Agenda

> Introductions

> Overview of workgroup goals/objectives

> First workgroup review

> Regulation concept

> Implementation concept

> Future meeting

> Discussion

Overview of Workgroup Meeting Goals/Objective

> Why a port truck regulation

- > Administrative directive
- > Part of overall goods movement plan
- > Recognized as a main emission source

> Workgroup goals/objectives

- > Devise a regulation that works
- Meet with stakeholders
- > Definitions
- > Implementation & enforcement
- Funding

Workgroup Meeting Review First meeting – November 13, 2006 > Purpose of meetings > Definitions > Ports > Port truck > Comments from workgroup participants > Why regulation affects only 3 ports > Type of truck affected > Dray-off Need for two regulations

Regulatory Scope Updates

> Ports: Expanded to include all ports

> Port trucks: Expanded to include trucks hauling containers, break bulk, bulk, petroleum, etc.

> Dray-off: Regulation expanded to include trucks servicing railyards

> Clarification of ARB's truck measures

ARB's Two Truck Measures

Port/Intermodal November 2007

Private Fleet November 2007

Regulation Concept

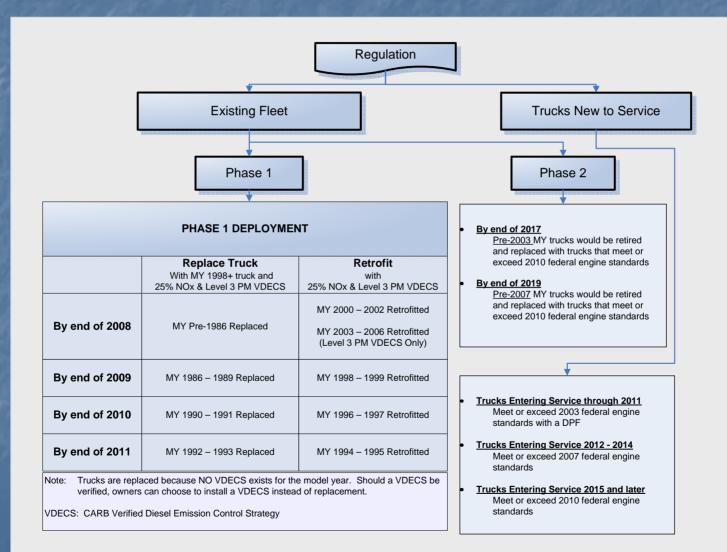


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Regulation Concept





PHASE 1 DEPLOYMENT

	Replace Truck With MY 1998+ truck and 25% NOx & Level 3 PM VDECS	Retrofit with 25% NOx & Level 3 PM VDECS			
By end of 2008	MY Pre-1986 Replaced	MY 2000 – 2002 Retrofitted MY 2003 – 2006 Retrofitted (Level 3 PM VDECS Only)			
By end of 2009	MY 1986 – 1989 Replaced	MY 1998 – 1999 Retrofitted			
By end of 2010	MY 1990 – 1991 Replaced	MY 1996 – 1997 Retrofitted			
By end of 2011	MY 1992 – 1993 Replaced	MY 1994 – 1995 Retrofitted			

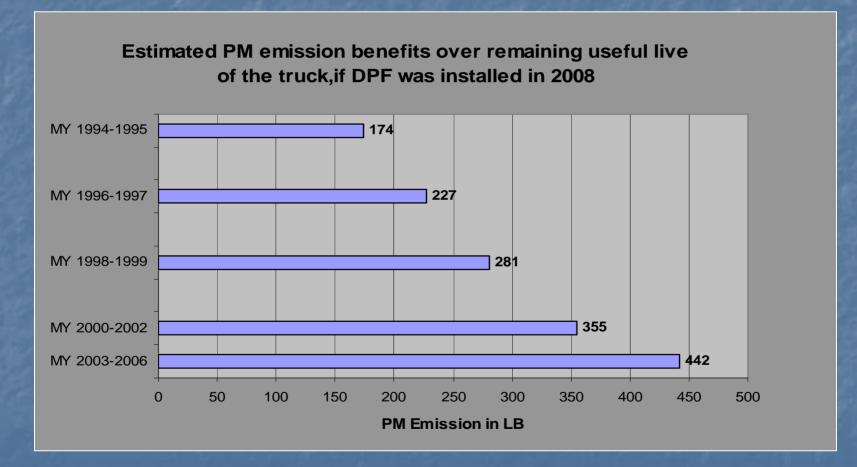
Note: Trucks are replaced because NO VDECS exists for the model year. Should a VDECS be verified, owners can choose to install a VDECS instead of replacement.

VDECS: CARB Verified Diesel Emission Control Strategy

	Phase 1		Phase 2
PHASE 1 DEPLOYMENT			 By end of 2017 Pre2003 MY trucks would be retired and replaced with trucks that meet or
	Replace Truck With MY1995+truck and Level 1 NOx&Level 3 PM VECS	Retrofit with Level 1 NOx & Level 3 PM VECS	exceed 2010 redeal with trucks that theet or exceed 2010 rederal engine standards By end 2001 Prov2007 MY fouries would be refired
By end of 2008	MY Pre-1985Replaced	MY 2000-2002 Retrotited MY 2003-2005 Retrotited (Level 3 PM VECS Only)	and replaced with trucks that meet or exceed 2010/federal engine standards
By end of 2009	MY 1985-1989 Replaced	MY 1998-1999 Retrofitied	
By end of 2010	MY 1990-1991 Replaced	MY 1996-1997 Retrolitied	<u>Trucks Entering Service through 2011</u> Meet or exceed 2003 federal engine standards with a DPF
By end of 2011	MY 1992-1993 Replaced	MY 1994-1995 Retrofitied	Trucks Entering Service 2012 - 2014 Meet or exceed 2007 fotune engine stem form

Regulation

Phase 1 (cont.)



Phase 2

By end of 2017

<u>Pre-2003</u> MY trucks would be retired and replaced with trucks that meet or exceed 2010 federal engine standards

By end of 2019

Regulation

al 1 NOx & Level 3 PM VE

Trucks New to Service

Phase 2

By end of 2019 Pro-2007 M and replace

Existing Elect

Phase 1

PHASE 1 DEPLOYMENT

WY 1985—1989 Rep WY 1990—1991 Rep

By end of 200 By end of 200

By end of 201

<u>Pre-2007</u> MY trucks would be retired and replaced with trucks that meet or exceed 2010 federal engine standards

Trucks New to Service

Regulation

Trucks New to Service

Phase 2

Existing Elee

Phase 1

PHASE 1 DEPLOYMENT

By end of 201 By end of 201 By end of 201



<u>Trucks Entering Service 2012 - 2014</u> Meet or exceed 2007 federal engine standards

Trucks Entering Service 2015 and later

Meet or exceed 2010 federal engine standards

Implementation Concept

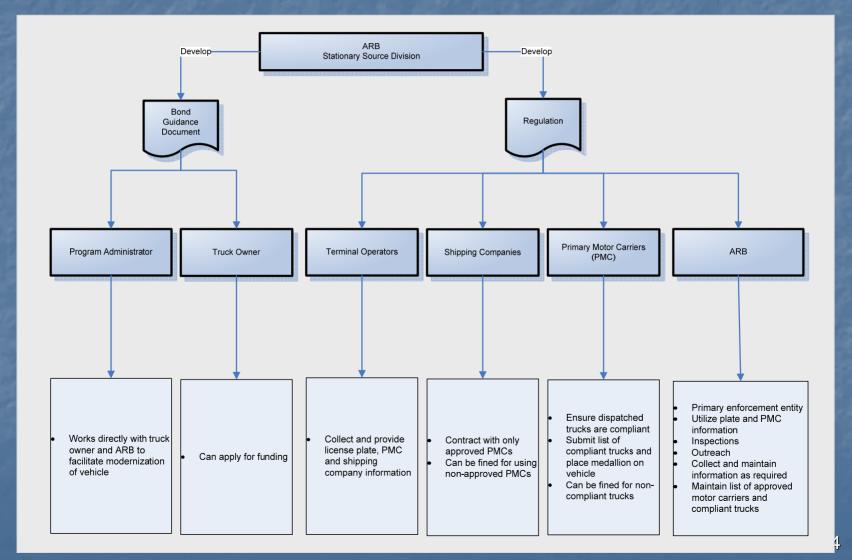


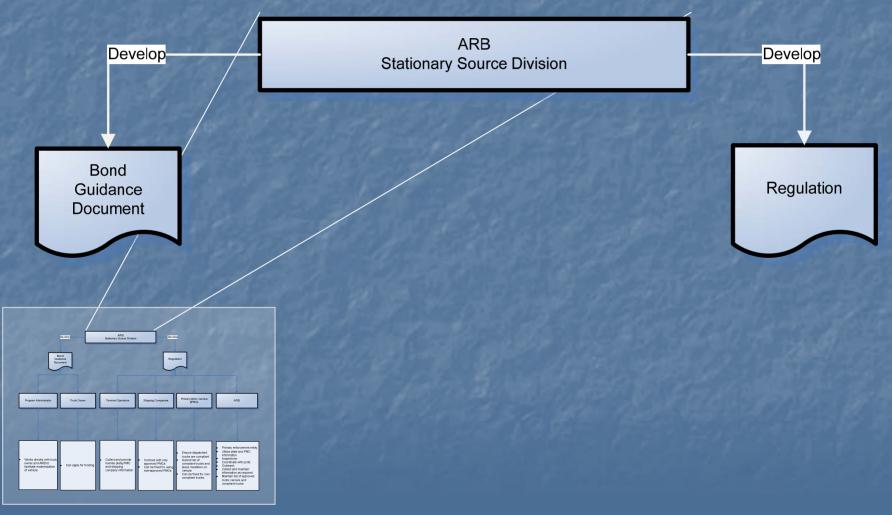
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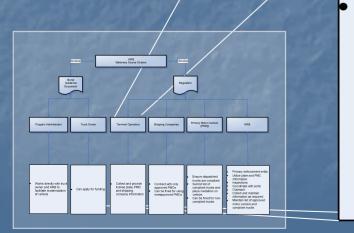
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Implementation Concept



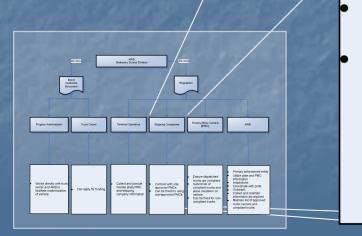


Terminal Operators



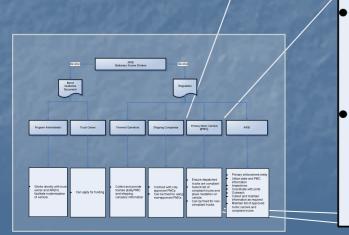
Collect and provide license plate, PMC and shipping company information

Shipping Companies

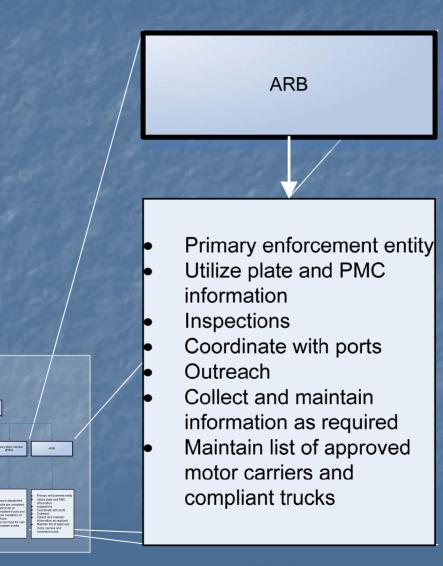


Contract with only approved PMCs Can be fined for using non-approved PMCs

Primary Motor Carriers



- Ensure dispatched trucks are compliant Submit list of compliant trucks and place medallion on vehicle
- Can be fined for noncompliant trucks

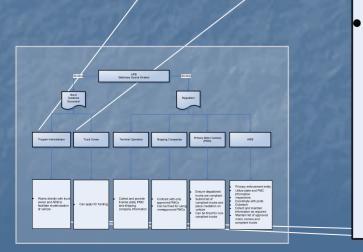


Bond Guidance Document

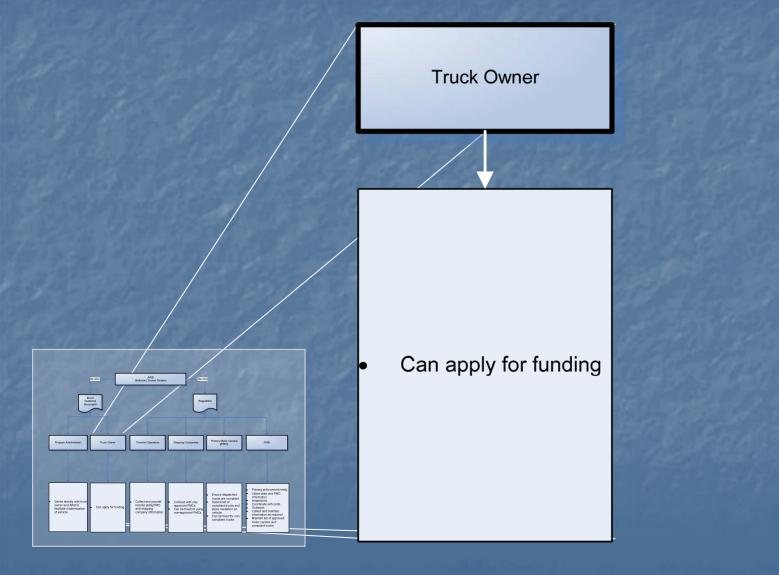
Works directly o owner and ARS facilitate moder of vehicle Regulation

Collect and provide license plate PMC and shipping comparer information

Program Administrator



Works directly with truck owner and ARB to facilitate modernization of vehicle



Action Items Future Meetings/Contact Info

Staff Report Including Draft Regulation – Sept. 2007
 Board Consideration – November 2007

Future Public Workgroup Meeting:
 To be Determined

Contact Information: Michael Miguel, Manager Phone: (916) 445-4236 email: mmiguel@arb.ca.gov

Website:

http://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm

Questions/Comments



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