# 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**

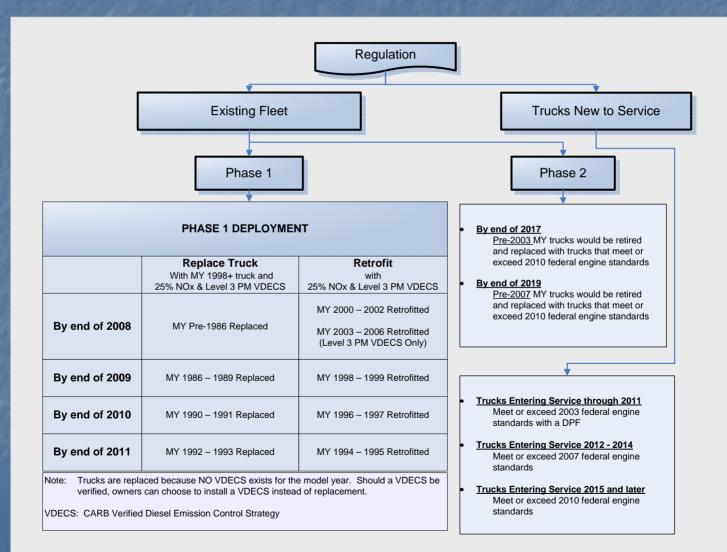


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### **Regulation Concept**





#### PHASE 1 DEPLOYMENT

	<b>Replace Truck</b> With MY 1998+ truck and 25% NOx & Level 3 PM VDECS	<b>Retrofit</b> 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			

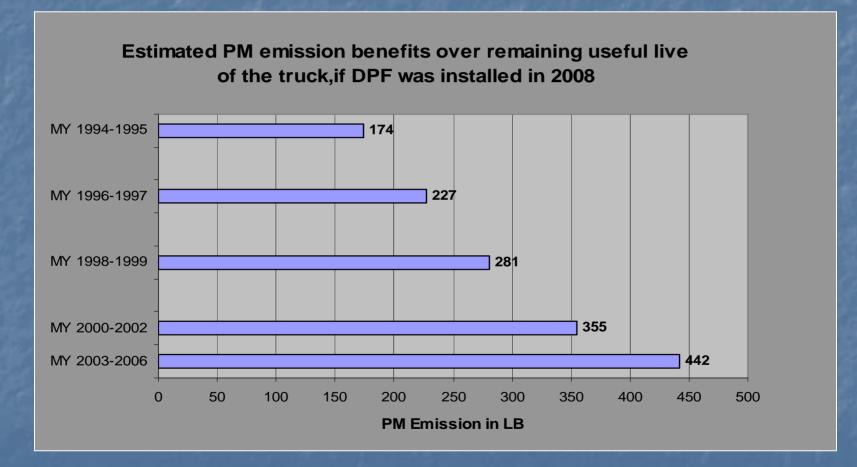
Note: Trucks are replaced because NO VDECS exists for the model year. Should a VDECS be verified, owners can choose to install a VDECS instead of replacement.

VDECS: CARB Verified Diesel Emission Control Strategy

	Phase 1		Phase 2
PHASE 1 DEPLOYMENT			<ul> <li>By end of 2017 Pre2003 MY trucks would be retired and replaced with trucks that meet or</li> </ul>
	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**

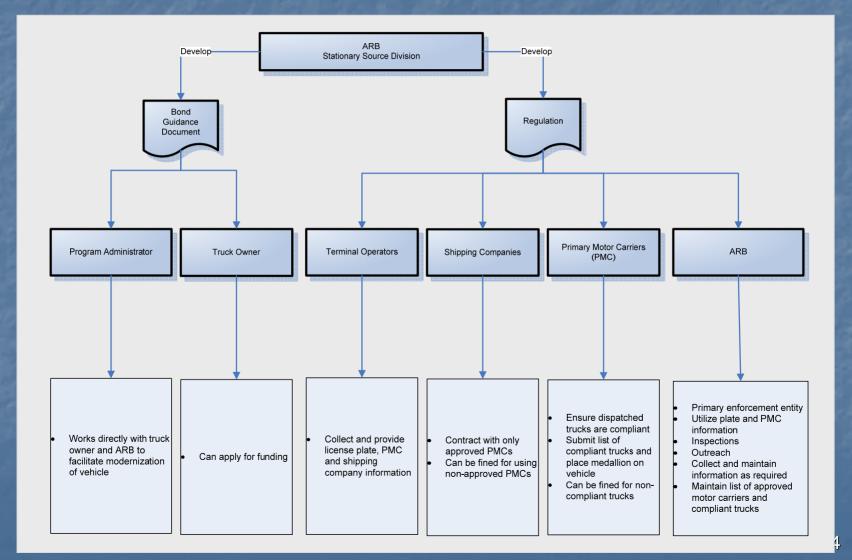


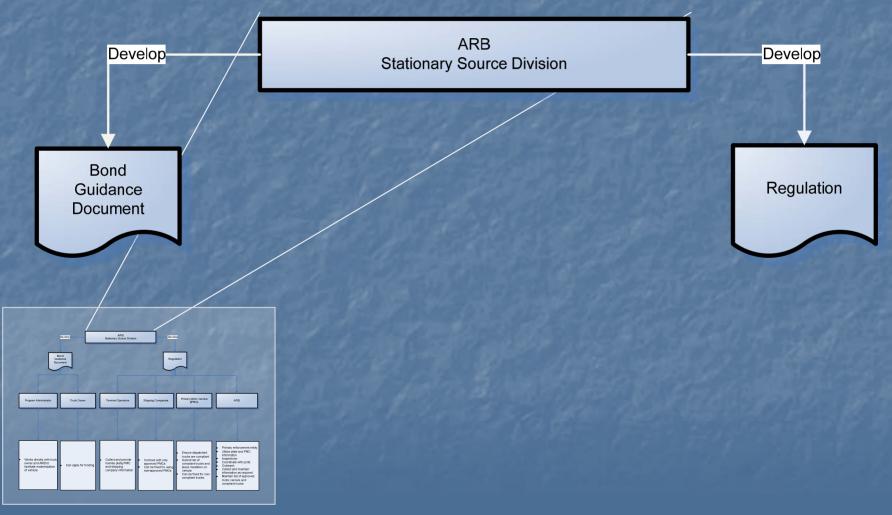
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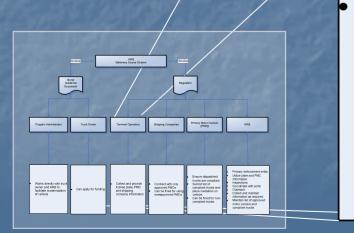
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### **Implementation Concept**



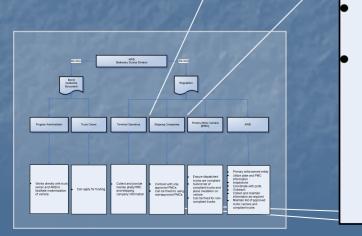


**Terminal Operators** 



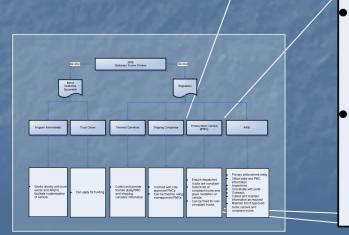
Collect and provide license plate, PMC and shipping company information

**Shipping Companies** 

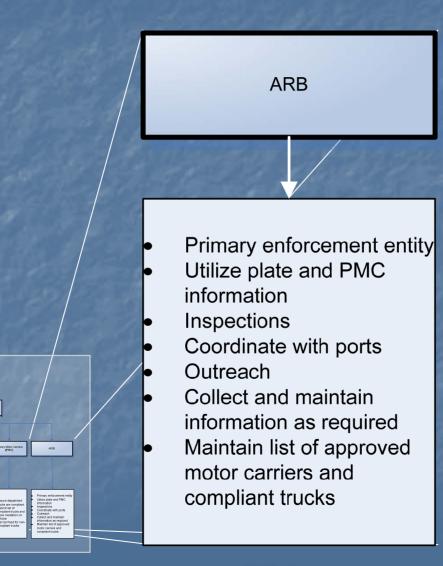


Contract with only approved PMCs Can be fined for using non-approved PMCs

**Primary Motor Carriers** 



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

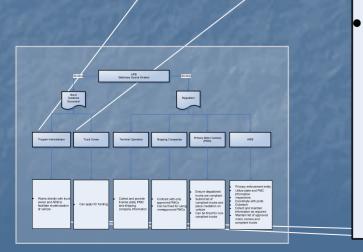


Bond Guidance Document

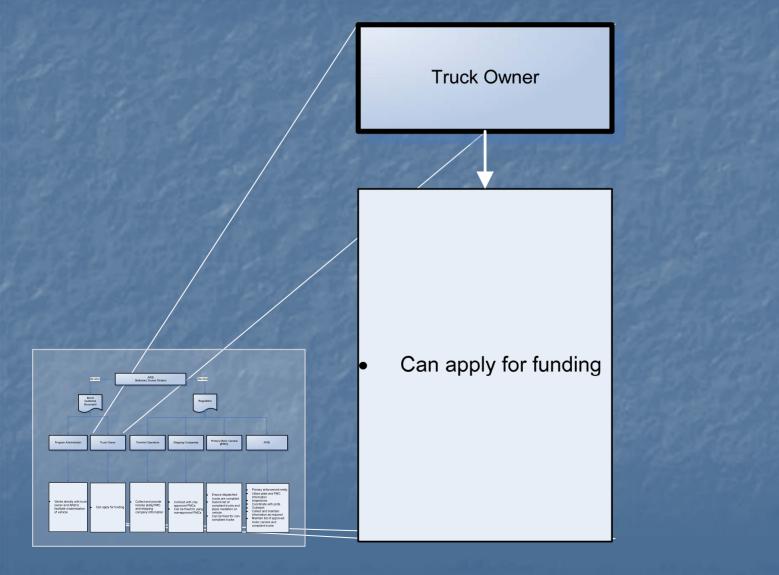
Works directly o owner and ARS facilitate moder of vehicle Regulation

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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