Commercial Harbor Craft Regulation

- Board approved in Nov. 2007
- Became effective Jan. 1, 2009
- Operational and new engine requirements for all commercial harbor craft
- In-use engine requirements for ferries, excursions vessels, tugboats, and towboats
Commercial Harbor Craft Vessel Types

- Ferries
- Excursion vessels
- Tugboats and towboats
- Crew and supply vessels
- Commercial fishing
- Charter fishing boats
- Pilot boats
- Work boats
- Other vessels
Requirements Apply to Vessels Within Regulated California Waters

♦ All internal waters

♦ All estuarial waters

♦ All ports and terminal facilities

♦ All waters within 24 nautical miles of California baseline
Harbor Craft Regulation Provides Significant Emission Reductions

- Emission reductions provide needed health benefits
  - Diesel PM — toxic air contaminant
  - Oxides of Nitrogen (NOx) — forms ozone

- Reductions support several key plans
  - Diesel Risk Reduction Plan
  - Goods Movement Plan
  - San Pedro Bay Port Clean Air Action Plan
  - State Implementation Plan (SIP)
Projected Statewide PM and NOx Emission Reductions

Commercial Harbor Craft Statewide NOx Emissions

Commercial Harbor Craft Statewide PM Emissions
Exemptions from Entire Regulation

- Vessels traversing within 24 nautical miles of the California Coast without stopping
- Temporary emergency rescue/recovery vessels
- Recreational vessels
- Ocean-going vessels (except ocean-going tugs)
- Vessel engines registered with the Portable Engine Registration Program prior to January 1, 2009
- U.S. Coast Guard vessels
- Military tactical support vessels
Engines on Barges

♦ Exempted if:
  – Registered in PERP or permitted by local air district prior to 1/1/09
  – Registered in PERP after 1/1/09 if:
    • Not permanently affixed to barge

♦ Engines may also be required to permit with the local air district
Operational Requirements

♦ Fuel use
  – CARB diesel or approved alternative

♦ Monitoring
  – non-resettable hour meters on all engines

♦ Recordkeeping

♦ Reporting
  – Initial report (Feb.28, 2009)
  – Change of ownership, vessel use, or operation report
  – Compliance plan and demonstration
    • Ferries, excursion, tugboats, and towboats
Engines on New Vessels and Replacement Engines

♦ New build vessels
  – Engine must meet U.S. EPA marine engine standards in effect at the time of vessel acquisition
    • New build ferries have an additional BACT requirement

♦ Replacement engines on in-use vessels
  – Engine must meet U.S. EPA marine engine standards in effect at the time of engine acquisition
New Build Ferry BACT Requirement

- BACT - Best Available Control Technology
- Propulsion engines on new build ferries must meet Tier 2 or 3 standards plus apply BACT
- ARB application and review process
  - Determination made on case-by-case basis
- May comply with Tier 4 engine when available
U.S. EPA Marine Engine Standards Effective Dates

- Tier 1 - 2000
- Tier 2 - 2004 to 2007
- Tier 3 - 2012 to 2014
  - 2009 - less than 100 hp
- Tier 4 - 2014 to 2017
In-Use Engine Requirements

- Vessels operating as ferries, excursion vessels, tugboat, or towboats
- Tier 0 and Tier 1 engines replaced, rebuilt, or retrofitted to meet current emission standard (either Tier 2 or 3)
- Oldest, highest use engines comply first
- Two compliance schedules
  - Statewide (except South Coast)
  - South Coast
Phased Compliance Schedule

♦ Statewide (except South Coast)
  – First compliance date December 2009
  – 2009-2016: Tier 0 engines
  – 2015-2022: Tier 1 engines
  – Accelerated compliance for ferry engines
    • all Tier 0 engines comply by 2014

♦ Accelerated schedule for South Coast
  – First compliance date December 2009
  – 2009-2013: Tier 0 engines
  – 2013-2020: Tier 1 engines
Ferries, Excursion Vessels, Tugboats, and Towboats

Exemptions from In-Use Engine Requirements

- Temporary replacement vessels
  - ARB approval required
- Registered historic vessels
- Engines rated at less than 50 horsepower
- Engines operated less than 300 hours per year
- Near-retirement vessels
Compliance Methods

- Replace with new engine
- Demonstrate in-use engine meets standard
  - Tier 2 prior to Tier 3 effective date
  - Tier 3 when standard becomes effective
- Demonstrate in-use engine operates less than 300 hours annually
Engine Model Year for Compliance Date Determination

- Engine’s actual model year
- Engine’s actual model year +5
  - If a diesel emission control strategy is employed that reduces the PM or NOx emissions by >25%
- Engine Tier 1 Rebuild Model Year
  - If Tier 0 engine was rebuilt to meet Tier 1 standards prior to January 1, 2008
Compliance Date Extensions

- ARB approval required
- Change in annual engine hours of operation
- No suitable engine replacement
- Manufacturer delay or installation difficulties
- Multiple engines on multiple vessels within fleet requiring compliance in one year
Engines on Multiple Vessels within Fleet with Same Compliance Year

♦ ARB approval required
  – Two or more engines on two or more vessels all with the same compliance year

♦ 2009 or 2010 compliance dates
  – Phased compliance extended to the end of 2013

♦ 2011 and beyond compliance dates
  – One year extension
Alternative Control of Emissions

♦ ARB approval required
♦ Must achieve equivalent or greater reductions
♦ Restricted to within one air district or specified geographic area
♦ Application process includes public review process
Funding Opportunities

♦ Require real, surplus, quantifiable, and enforceable reductions

♦ Carl Moyer Program

♦ Proposition 1B
  – Funding in specific trade corridors only:
    • Los Angeles/Inland Empire, Central Valley, Bay Area, and San Diego/Border
  – Available for specific vessel types:
    • tugboats, towboats, crew and supply vessels, commercial fishing boats, work boats, and pilot boats

♦ Contact your local air pollution control district
# Summary of Requirements

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*Propulsion Engines Only
** Replacement Engines on in-use vessels
2009 Compliance Dates

♦ February 28, 2009
  – Initial report due
  – Compliance plan for Dec. 2009 compliance date
  – Reporting forms available

♦ December 31
  – First in-use engine compliance deadline
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