



Air Pollution Control District
San Luis Obispo County

AIR QUALITY & AGRICULTURE

Sustainable Ag Expo

November 14-15, 2011

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SLO County Air Pollution Control District

OUR MISSION

- ▶ As stewards of healthful air supporting a healthy environment our mission is to:
 - ▶ Realize and preserve clean air for all
 - ▶ Promote community and individual responsibility for air quality
 - ▶ Provide quality and cost effective service



AIR QUALITY AND YOUR HEALTH

▶ **Types of Pollutants**

▶ Criteria Pollutants

- ▶ Regulated under the Federal & CA Clean Air Acts
- ▶ Health-based standards
- ▶ SLO County Air Quality:
 - ▶ Non attainment for State ozone, particulate matter standards

▶ Toxic Air Contaminants (TACs)

▶ Greenhouse Gases (GHG)

▶ **Sources of Pollutants in SLO County**

- ▶ Mobile sources (cars, trucks, trains, planes)
- ▶ Stationary industrial sources
- ▶ Portable engines

HOW MANY DIESEL ENGINES SUPPORT YOUR OPERATION?



TOPICS FOR REVIEW

- ▶ **Health Based Reasoning for State's Diesel Risk Reduction Plan**
- ▶ **State Regulations**
 - ▶ Stationary / Portable Agricultural Engines
 - ▶ On-Road Trucks
 - ▶ Agricultural Tractors
 - ▶ Off-Road Equipment
- ▶ **APCD Grant Funding Opportunities**



STATIONARY/PORTABLE DIESEL AG ENGINE REG



▶ State's Stationary Ag Engine ATCM

- ▶ Registration deadline w/ Air Districts was 2008
 - ▶ If you missed it, call APCD Engineering Division at 781-5912
- ▶ Defines engine emission standards that affect new & existing:
 - ▶ Stationary & Portable Booster Irrigation Engines, Frost Protection Units & other diesel ag engines
- ▶ Defines engines exempt from standards but not registration
 - ▶ Existing in-use remote engines & emergency standby gen-sets
 - ▶ Diesel ag wind machines are exempt from ATCM & registration

STATIONARY/PORTABLE DIESEL AG ENGINE REG



- ▶ **State's Stationary Ag Engine ATCM – continued**
 - ▶ Existing Ag Engine has Remote Exemption if it is BOTH
 1. In an area that meets Federal AQ Standards
 2. All operating locations are more than ½ mile from:
 - ▶ 3 non-worker residences, School, or Hospital
 - ▶ Remote Ag Engines currently have no emission reduction schedule
 - ▶ Must be registered with APCD, plus recordkeeping & reporting

ON-ROAD TRUCK REGULATION AG PROVISIONS



- ▶ April 29, 2011 was State's Ag Vehicle Reporting Deadline
- ▶ Relaxed requirements for low/limited use & specialty agricultural vehicles
- ▶ Relaxed requirements for small fleets (3 or fewer trucks) and NOx Exempt Area trucks but **must report to ARB by January 31, 2012**
- ▶ All other Ag Vehicles– Must comply with the Regulation's normal compliance schedule

ON-ROAD HEAVY-DUTY TRUCK REGULATION



▶ **Particulate Filter requirements to reduce PM**

- ▶ Phased in beginning 1/1/2012
- ▶ Filters on all non-exempt trucks by 1/1/2015

▶ **NOx emissions reductions**

- ▶ Phased in for all non-exempt trucks beginning 1/1/2015
- ▶ Engines for all trucks must meet the 2010 standards by 1/1/2023

ON-ROAD MEDIUM-DUTY TRUCK REGULATION



▶ **Twenty-year old trucks must be replaced**

- ▶ Starting 1/1/2015
- ▶ Engines for all trucks must meet the 2010 standards by 1/1/2023

▶ **PM filter is optional**

- ▶ If installed by 1/1/2014, truck will not need to be replaced until 1/1/2020

AGRICULTURAL TRACTOR REGULATION



- ▶ State's Regulation – Scheduled for 2013 adoption
- ▶ www.arb.ca.gov/ag/agtractor/agtractor.htm

- ▶ If your equipment is used less than 50% of the time for agriculture, then the equipment is likely subject to the State's Off-Road Equipment Regulation
 - ▶ <http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm>

SLO COUNTY APCD GRANT FUNDING OPPORTUNITIES FOR AGRICULTURE



GRANTS

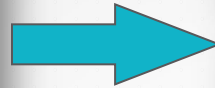
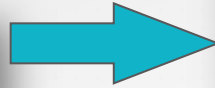
- ▶ **Diesel Reduction Grant project must:**
 - ▶ Be completed AHEAD of Regulatory Deadline
 - ▶ Provide emission reductions above and beyond Reg. requirements
- ▶ **Applications deemed complete, annual funding is provided on a first-come, first served basis**
- ▶ **Maximum Award**
 - ▶ Up to 80% of eligible costs for replacing old ag off-road irrigation engines or tractors/equipment
 - ▶ Up to \$60,000 for replacing old on-road trucks
 - ▶ Up to 100% of the eligible costs of the VDECS
 - ▶ Award not to exceed \$150,000 per program participant per calendar year



AGRICULTURAL GRANTS

▶ Portable / Stationary Agricultural Engines

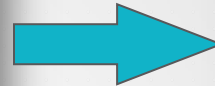
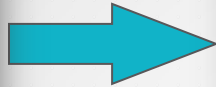
- ▶ Electrify old diesel engines
- ▶ Repower old diesels with current Tiered diesel engines
- ▶ Retrofit diesel engines with ARB Verified Diesel Emission Control System (VDECS)



EXAMPLE PROJECT : Replace diesel booster with submersible electric motor/pump with VFD for variable pressure needs

EQUIPMENT REPLACEMENT GRANTS

- ▶ Replace old ag equipment with the cleanest available equipment
- ▶ Work with one of the APCD Approved Dealers and Scrap Yards
- ▶ Business must have a SLO County physical address

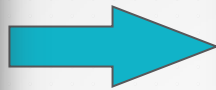


EXAMPLE PROJECT: Replace old diesel equipment with new cleanest, like for like tiered diesel equipment



TRUCK FLEET MODERNIZATION GRANTS

- ▶ Replace old HHD & MHD trucks with 2007 compliant or newer trucks
- ▶ Work with one of the APCD Approved Dealers and Scrap Yards
- ▶ Business must have a SLO County physical address



EXAMPLE PROJECT: Replace old diesel trucks with new or late-model used diesel trucks



OTHER APCD PROGRAMS

▶ **Food Miles Campaign**

- ▶ Food, on average, travels 1,500 miles to get to the consumers plate
- ▶ The APCD developed an awareness campaign to reduce the emissions from food miles and help preserve local agricultural landscapes.
- ▶ Provides tools to the public
 - ▶ Tote bags
 - ▶ Recipe cards featuring local and seasonal foods
 - ▶ Magnet they can have on their fridge that shows the difference in emissions between local and imported foods



QUESTIONS?

- ▶ SLO County APCD 805.781.5912
- ▶ www.slocleanair.org
- ▶ ARB Diesel Hotline: 1-866-6-Diesel

On-Road and Ag Electrifications

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