

OXYGENATED FUEL PROGRAM: BENEFITS OUTWEIGH COSTS

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POLICY OF COLORADO AIR QUALITY CONTROL ACT

- “MAXIMUM PRACTICAL DEGREE OF AIR PURITY”
- METHODS THAT ARE “ECONOMICALLY REASONABLE”
- BENEFITS BEAR A REASONABLE RELATIONSHIP TO COSTS



BENEFITS OF ETHANOL BLENDED GASOLINE

- REDUCES CO EMISSIONS BY AT LEAST 50 TPD
- REDUCES POTENTIAL HEALTH RISKS FOR ELDERLY AND PERSONS WITH HEART DISEASE
- REDUCES EMISSIONS OF TOXICS, PM2.5, AND GREENHOUSE GASES



BENEFITS OF ETHANOL BLENDED GASOLINE (cont'd)

- SUPPORTS AGRICULTURAL ECONOMY
- REDUCES DEPENDENCE ON FOREIGN OIL
- FEDERAL AND STATE POLITICAL SUPPORT



COSTS OF OXYFUEL PROGRAM

- VIRTUALLY ZERO



LEGAL STANDARDS

- AQCA'S POLICY TO ACHIEVE MAXIMUM PRACTICAL DEGREE OF AIR PURITY WHEN BENEFITS BEAR REASONABLE RELATIONSHIP TO COSTS
- NO REQUIREMENT TO RESCIND PROGRAM OR REMOVE FROM SIP



NEXIDEA ECONOMIC IMPACT ANALYSIS

- NEXIDEA – PETROLEUM REFINING CONSULTING FIRM
- COMPARES THE COSTS OF GASOLINE WITH AND WITHOUT ETHANOL
- BASED ON INDIVIDUAL REFINERY'S SUPPLY COST TO MEET GASOLINE DEMAND
- COST TO CONSUMER ABOUT 24/100 OF ONE CENT/GALLON OR \$.10 PER MONTH FOR AVERAGE DRIVER



CARBON MONOXIDE EMISSION REDUCTIONS

- APCD MODEL RESULTS: 50 TPD
- MODELING UNDERSTATES CO REDUCTIONS:
 - APCD 1999 STUDY SHOWS EVEN HIGHER CO REDUCTIONS FOR “HIGH EMITTERS”
 - MOBILE6.2 FAILS TO INCORPORATE CO REDUCTIONS IN NEWER MODEL VEHICLES



ETHANOL REDUCES POTENTIAL CO-RELATED HEALTH RISKS

- EPA CO CRITERIA DOCUMENT (2000):
EPIDEMIOLOGIC STUDIES REPORT
ASSOCIATION OF CO LEVELS BELOW
NAAQS WITH EXACERBATION OF HEART
DISEASE IN ELDERLY AND INCREASES IN
PREMATURE MORTALITY AND
RESPIRATORY ILLNESS
- EPA RECOMMENDS FURTHER RESEARCH
- EPA CITES GREATER SENSITIVITY AT HIGH
ALTITUDES. CALIF. ADOPTED LAKE TAHOE
SAAQS OF 6 PPM.



ETHANOL BLENDED FUEL REDUCES OTHER POLLUTANTS

- GREENHOUSE GAS EMISSIONS BY 12 – 19% (ARGONNE NATIONAL LAB 1997)
- REDUCES TOXICS EMISSIONS, E.G., BENZENE



PM2.5 NAAQS

- 50% OF PM2.5 IN DENVER FROM MOTOR VEHICLES – 10% ETHANOL REDUCES BY UP TO 50% (APCD 1997; CRC 1999)
- EPA STAFF PAPER (JULY 1, 2005) RECOMMENDS 24-HR NAAQS OF 25 – 40 $\mu\text{g}/\text{m}^3$
- DENVER AT ABOUT 24 - 25 $\mu\text{g}/\text{m}^3$ (2002-2004)
- OXYFUEL PROGRAM MAY PREVENT NONATTAINMENT OR MAY BE REQUIRED IN FUTURE PM2.5 SIP (REMOVED FROM PM10 SIP IN 2001)
- RETAIN PROGRAM PENDING EPA ADOPTION OF NEW NAAQS AND DETERMINING NEED FOR OXYFUEL PROGRAM



ECONOMIC AND SOCIAL BENEFITS OF ETHANOL

- IN COLORADO, 3900 CORN GROWERS PRODUCED OVER 120 MILLION BUSHELS WORTH \$300 MILLION IN 2003
- INCREASES U.S. EMPLOYMENT BY 192,000 JOBS
- IMPROVES THE U.S. TRADE BALANCE BY \$2 BILLION/YR
- ADDS \$450 MILLION TO STATE TAX RECEIPTS
- LESSENS DEPENDENCE ON IMPORTED OIL



NO GROUNDS TO REMOVE OXYFUEL PROGRAM FROM SIP

- POSSIBLE GROUNDS TO REMOVE OXYFUEL PROGRAM FROM SIP
 - IF EPA/CAA/AQCA REQUIRES REMOVAL
 - IF COSTLY
 - IF NO AIR QUALITY OR POTENTIAL HEALTH BENEFIT
- NONE OF THESE GROUNDS EXIST TO REMOVE PROGRAM
- ALL GROUNDS SUPPORT RETAINING PROGRAM



CONCLUSION

- OXYGENATED FUEL PROGRAM IS VIRTUALLY COST-FREE
- PROVIDES AIR QUALITY AND HEALTH BENEFITS
- MAY BE REQUIRED FOR FUTURE PM2.5 SIP
- BENEFITS FAR OUTWEIGH COSTS



GOVERNOR OWENS SUPPORTS ETHANOL FUEL

- “ETHANOL IS A HOMEGROWN FUEL THAT RESULTS IN JOB CREATION, INCREASED FARM INCOME, IMPROVED AIR QUALITY, AND GREATER ENERGY INDEPENDENCE BY REDUCING IMPORTS OF FOREIGN OIL.” STATEMENT BY GOVERNOR OWENS (AG. DEPT. PRESS RELEASE, MAY 26, 2005)

