Coalition For A Safe Environment 11-6-1

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August 24, 2011

California Environmental Protection Agency California Air Resources Board Chairman Mary Nichols 1001 "I" Street Sacramento, California 95812

Re: AB 32 California Global Warming Solutions Act of 2006

CARB Public Meeting Agenda August 24, 2011 Item # 11-6-1

Su: Public Comment Request To Not Approve & Adopt The

Final Supplement to the AB32 Scoping Plan Functional Equivalent Document

#### Dear Chairman Nichols & Members of the Board:

The Coalition For A Safe Environment (CFASE) wishes to submit these public comments requesting that the California Air Resources Board (CARB) not approve and adopt the proposed the Final Supplement to the AB32 Scoping Plan Functional Equivalent Document. The Coalition For A Safe Environment requests this on behalf of our members in over 25 California cities and on behalf of the general public.

The Coalition For A Safe Environment is a non-profit Environmental Justice Community based organization with over 500 members in over 25 cities in California primarily residing in and near ports, goods movement transportation corridors, petroleum and energy industries communities. CFASE was founded in April of 2001 in the City of Los Angeles Hispanic community Wilmington. Our organization Mission Statement is:

"To protect, promote, preserve and restore our Mother Earth's delicate ecology, environment, natural resources and wildlife. To attain Environmental Justice in international trade marine ports, goods movement transportation corridors, petroleum and energy industry communities."

We oppose the approval and adoption of the Final Supplement to the AB32 Scoping Plan Functional Equivalent Document because:

#### It Fails To Include Additional Categories Of Alternatives Analysis:

The FED fails to include feasible and cost-effective Additional Categories of Alternatives Analysis to the five (5) that were included in the Final Supplement which were expected by the public and should have been included in the Final Supplement as required by the court judgment:

It Fails To Include Feasible & Cost-Effective Alternative & Emerging Technologies In Alternatives 3 and 5:

The FED fails to include known feasible and cost-effective Alternative Technologies and New Emerging Technologies in Alternatives 3 and 5 which were considered feasible and cost-effective alternatives by the public and should have been included in the Final Supplement as required by the court judgment:

#### **Additional Categories of Alternatives Analysis:**

#### 1. Re-Assessment of Public/AB32 EJAC Recommended Early Action Measures

During the CARB AB32 public comment period and public hearings process over 50 Early Action Measures were made by public interest organizations, individuals, the Coalition For A Safe Environment and the AB32 Environmental Justice Advisory Committee. ARB adopted 21 of 34 EJAC recommendations.

We believe that ARB could have re-assessed the non-selected proposed Early Action Measures as an additional Alternative Analysis update but took no action. In addition, some of these Early Action Measures have now undergone additional testing, demonstration and certification.

### 2. Assessment of Alternative Technologies Under Current, Recent ARB Review and Certification

During the CARB AB32 Scoping Plan process and hearings ARB staff focused primarily on Early Action Measures being proposed during the public comment period and hearings. ARB staff did not include information on technologies it was currently reviewing, preparing test protocol, sponsoring demonstrations or undergoing Executive Order certification which could soon be commercially available and applicable for significant GHG reductions.

#### Examples:

a. Advanced Cleanup Systems, Inc. - Advanced Locomotive Emissions Control System (ALECS). ARB staff failed to recommend and disclose that ARB was a governmental agency sponsor of the Advanced Cleanup Systems, Inc. - Advanced Locomotive Emissions Control System (ALECS) successful demonstration project conducted at Roseville Railyard in 2007. The test results disclosed that ALECS captured 92%-98% of all emissions. ARB to-date has still not certified the technology. Note: There is no other technology that can capture locomotive emissions at a railyard.

ARB released in August 2009 a report, "Technical Options to Achieve Additional Emissions and Risk Reductions from California Locomotives and Railyards," which listed 37 emission reduction options in which ALECS # 21 as a feasible and cost-effective technology.

b. Advanced Cleanup Systems, Inc. - Advanced Maritime Emissions Control System (AMECS). ARB staff failed to recommend and disclose that ARB was a governmental agency sponsor of the Advanced Cleanup Systems, Inc. - Advanced Maritime Emissions Control System (AMECS) successful demonstration project conducted on three different ships at the Port of Long Beach 2008-2009. The test results disclosed that AMECS captured 92%-98% of

all emissions. Note: Electric Shore-Power can only prevent approximately 50% of ship emissions which come from the main engine while docked and not the auxiliary engines or boilers. Also CARB has not certified Port Electric Shore-Power.

AMECS can be used in addition to electric shore-power and on multiple ships at the same time. AMECS can also be built on a barge and taken outside the break water to meet a ship for additional emissions capture. ARB to-date has still not certified the technology. Note: There is no other technology that can capture ship exhaust emissions at a port or at sea.

#### c. American MagLev Technology, Inc. (AMTI) – Environmental Mitigation & Mobility Initiative "EMMI" Logistics Solution Zero Emissions MagLev Freight Train

ARB staff failed to recommend and disclose that there are several Zero Emissions Freight Transportation Systems technologies such as American MagLev Technology, Inc who have built a working demonstration prototype MagLev Train. Since 2008 AMTI has even offered to build a demonstration project at their own cost at the Ports of Long Beach and Los Angeles of which no progress has been made.

ARB released in August 2009 a report, "Technical Options to Achieve Additional Emissions and Risk Reductions from California Locomotives and Railyards," which listed 37 emission reduction options in which ALECS # 30 as a feasible and cost-effective technology.

#### d. Alameda Corridor Train Electrification – Zero Emissions Freight Train

ARB staff failed to recommend and disclose that the Alameda Corridor Transit Authority (ACTA) which connects the Port of Los Angeles and Port of Long Beach to the Union Pacific and BNSF Railroad yards in downtown Los Angeles and Commerce was built with the option to provide power for an Electric Train.

ARB released in August 2009 a report, "Technical Options to Achieve Additional Emissions and Risk Reductions from California Locomotives and Railyards," which listed 37 emission reduction options in which the Alameda Corridor Electrification # 29 as a feasible and cost-effective technology.

# e. Vision Motor Corp. – Hydrogen Gas Fuel Cell Zero Emissions Drayage Truck & Terminal Tractor

ARB staff failed to recommend and disclose that Vision Motor Corp. has built a Hydrogen Gas Fuel Cell Zero Emissions Tyrano 80,000lb. Drayage Truck and a 130,000lb. Terminal Tractor that can be used at ports, intermodal facilities and railyards and is currently undergoing ARB Approval and Testing Protocol for Executive Order Certification. The Ports of Los Angeles and Long Beach have ordered two trucks.

# f. Miracle Mile Solutions, Inc. – Diesel Truck Vehicle Additive Technology Solution System (VATSS)

ARB staff failed to recommend and disclose that the Miracle Mile Solutions, Inc. – Vehicle Additive Technology Solution System (VATSS) is currently undergoing ARB Testing Protocol for Executive Order Certification. VATSS is a retrofit for 1985-2006 diesel trucks which creates an on-demand and on-board cleaner hydrogen-oxygen gas that dramatically increases combustion efficiency, increased gas mileage reduces emissions, reduces fuel consumption and decreases fuel costs.

# 3. Assessment Of Existing Standards, Rules & Certified BACT Technologies Which Currently have Higher Efficiencies

ARB staff failed to review existing Standards, Rules and BACT for parts, equipment and systems to determine if there are newer higher efficiency standards that can be adopted which are commercially available and applicable for significant GHG reductions.

#### Examples:

#### a. Petroleum Industry Storage Tank Vapor Recovery System BACT Efficiency

The South Coast Air Quality Management District and other state AQMD's have adopted a BACT Vapor Recovery System standard of 95% efficiency which is not adequate considering the large size of petroleum industry storage tanks and the large number which still results in tons of annual VOC and GHG emissions at each oil refinery and storage tank farm facility. There are now 99%+ efficient Vapor Recovery Systems which are off-the-shelf.

# b. All Petroleum Industry Storage Tanks Do Not Have Vapor Recovery Systems

California AQMD's do not require Vapor Recovery Systems on all Petroleum Industry Storage Tanks.

# 4. Assessment of Alternative Technologies Currently Being Tested and Demonstrated Not by CARB

During the CARB AB32 Scoping Plan process and hearings ARB staff focused primarily on Early Action Measures being proposed during the public comment period and hearings. ARB staff did not include information on technologies it could have easily obtained by conducting basic Internet searches, contacting other regulatory agencies, ports and environmental organizations. There are many new emerging technologies which are currently available or soon will be and applicable for significant GHG reductions.

#### Examples:

#### a. The Port of Los Angeles 10MW Solar Energy Project

The Port of Los Angeles has adopted a 10MW Solar Energy Project Goal and has completed the first 1MW Solar Energy Installation at a Cruise Ship Terminal.

The ARB staff failed to recommend and include this technology in its Alternative Analysis.

#### b. The Port of Los Angeles Purchases 1st Hybrid Tug Boat

The Port of Los Angeles has purchased the 1<sup>st</sup> Hybrid Tug Boat. The ARB staff failed to recommend and include this technology in its Alternative Analysis.

#### c. Vertical Axis Wind Energy Turbines

There are now over 10 companies that manufacture Vertical Axis Wind Energy Turbines which can be installed at California Ports and Break Waters. Vertical Axis Wind Energy Turbines take up 80% less space than traditional Vertical Axis Turbines and because they do not have long blades they are not a danger to endangered California coastal birds. The ARB staff failed to recommend and include this technology in its Alternative Analysis.

## d. Port of Los Angeles New Marine Oil Import Terminal To Use Electric Shore Pumps

A Port of Los Angeles New Marine Oil Import Terminal will use Electric Shore Pumps to replace an oil tanker ship using its auxiliary engines and boilers while docked to unload crude oil. This eliminates fugitive VOC and GHG emissions. The ARB staff failed to recommend and include this technology in its Alternative Analysis.

# e. Nippon Ship Building Deploys The 1<sup>st</sup> On Board Vapor Recovery System Tanker Ship

Japan's Nippon Ship Building has built the 1<sup>st</sup> on board Vapor Recovery System Tanker Ship. The Vapor Recovery System eliminates tons of fugitive VOC and GHG emissions while the ship travels at sea and while docked. The ARB staff failed to recommend and include this technology in its Alternative Analysis.

While the FED states that it has updated and lowered its emissions projections based on the current economic forecasts, we wish to state for the record that CFASE in numerous public comment documents submitted to CARB, the South Coast AQMD, Port of Los Angeles, Port of Long Beach, Caltrans and the US EPA has identified numerous errors in annual emissions reporting by ports, goods movement industry and oil refineries which have not been corrected.

CFASE and other organizations in previously submitted public comments to CARB have provided information and data which has disclosed that CAP and Trade has been a failure in Europe and is absolutely unacceptable to Environmental Justice Communities due to the significant negative public health impacts, premature death impacts, public safety impacts, socio-economic impacts, future environmental and biological impacts.

CAP and Trade will cause no decrease in significant negative impacts because it allows polluting industries to continue to pollute in local Environmental Justice Communities where they are located, while allowing them to buy credits somewhere else.

Alternatives 3, 4 and 5 are inadequate because they do not contain an adequate Alternatives Analysis of all options, an adequate assessment of feasible and cost-effective alternative technologies to reduce Green House Gas Emissions and will continue to cause significant negative public health impacts, premature death impacts, public safety impacts, socioeconomic impacts, future environmental and biological impacts.

In conclusion, we request that the California Air Resources Board (CARB) not approve and adopt the proposed the Final Supplement to the AB32 Scoping Plan Functional Equivalent Document for its fails to contain adequate Alternatives Analysis, adequate feasible and cost-effective alternative technologies to reduce Green House Gas Emissions. The FED does not comply with the spirit and intent of the court order and court case of which CFASE is a litigant party too. See photo attachments which show examples of feasible and cost effective alternative technologies.

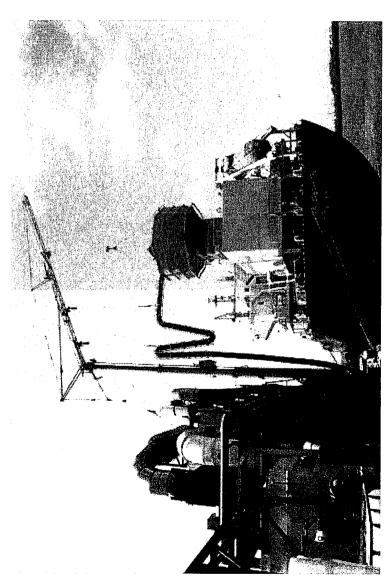
Cordially,

Jesse N. Marquez

**Executive Director** 

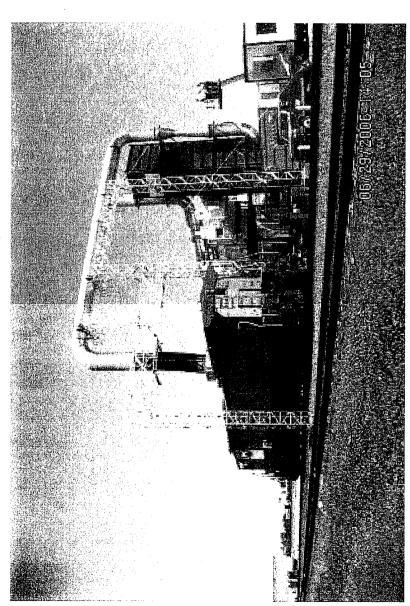
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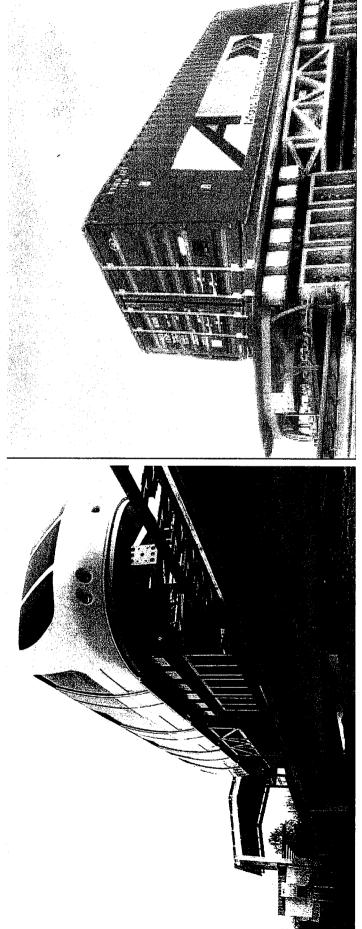
Advanced Maritime Emissions Control System (AMECS)

exhaust gas. The ECS collects both auxiliary engine and boiler exhaust gas emissions from a ships smoke stack using an The ETS utilizes state-of-the-art exhaust cleaning technologies such as a Pre-Conditioning Chamber to remove The AMECS technology can successfully remove Sulfur Dioxides (SOX) by 99%, Nitrogen Oxides (NOX) by 99%, Particulate AMECS can be used when a ship is not retrofitted or built to plug into electric shore Note: Not all shore power systems can stop boiler gas exhaust, so there may only be a 50% emissions AMECS consists of two major system components, the Exhaust Capture System (ECS) and the Emissions Treatment System The exhaust is drawn SO2, a Cloud Chamber Scrubber to remove PM and VOC's and a Selective Catalytic Reduction Reactor to remove NOX and VOC's. Matter (PM) by 95.5% and Volatile Organic Compounds (VOC's) 97%. AMECS can be built dockside to service ships at berth, built on a barge and tied alongside a ship while anchored out at sea or tied alongside a ship while being transported from sea or power or when there is no electric shore power available. The first successful demonstration was performed at the Port of Long Ships generate emissions from the ship service diesel generators exhaust (auxiliary engines) and auxiliary boiler by a venturi fan blower from the bonnet through a flexible intake hose duct into the ETS for removal and treatment of harmful eduction. Contact Info.: Advanced Cleanup Technologies, Inc., 20928 Lamberton Ave., Carson, California 90745, emissions intake hose duct via a collapsible bellows capture bonnet which is placed over the smoke stack. 1423, 310-505-9636 www.advancedcleanup.com outer harbor to a port terminal dock. Beach in 2008.



Advanced Locomotive Emissions Control System (ALECS)

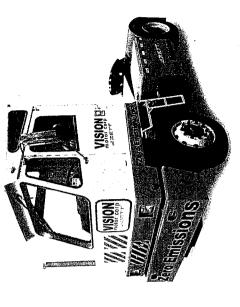
ALECS consists of two major system components, the Exhaust Capture System (ECS) and the Emissions Treatment System using an emissions intake hose duct via a mechanical hood which is placed over the locomotive engine smoke stack while in maintenance or in rail yards. The ALECS System can be configured to have multiple bonnets to connect a series of locomotive Locomotive train diesel fuel engines generate exhaust. The ECS collects exhaust gas emissions from the smoke stack The ALECS technology can successfully remove Sulfur Dioxides (SOX) by 99%, Nitrogen Oxides (NOX) by 99%, Particulate exhaust is drawn by a venturi fan blower through a flexible intake hose duct into the ETS for removal and treatment of harmful pollutants. The ETS utilizes state-of-the-art exhaust cleaning technologies such as a Pre-Conditioning Chamber to remove SO2, a Cloud Chamber Scrubber to remove PM and VOC's and a Selective Catalytic Reduction Reactor to remove NOX and VOC's. Matter (PM) by 95.5% and Volatile Organic Compounds (VOC's) 97%. ALECS can be built in a building or alongside the rail tracks. The first successful demonstration was performed at the Union Pacific J.R. Davis Rail Yard in Roseville, California in 2006, engines and can be mounted on an overhead rail system which can traverse back and forth over the locomotive engines. Contact Info.: Advanced Cleanup Technologies, Inc., 20928 Lamberton Ave., Carson, California 90745, 310-763-1423 505-9636 www.advancedcleanup.com



MagLev Train Cargo-Container Transportation Systems

magnetic forces towards the track. The air gap distance is approximately one-quarter inch. MagLev Trains are highly reliable computer-controlled electronic transportation systems requiring no moving mechanical parts for suspension, acceleration or however, building the initial infrastructure has a higher cost that is easily paid off over time. The technology is all electric, uses Magnetic Levitation technology uses electromagnetic field forces to lift a vehicle or cargo carrier into the air against gravity, are built under the vehicle or carrier which wraps under the track. The vehicle or carrier is then pulled up against the gravity by braking. MagLev Trains are less expensive to operate and maintain than traditional high speed trains, planes or intercity buses, no fuel and emits no emissions or green house gases. A Maglev train can be built over any flat area, including along side or MagLev passenger trains are currently being used in China and American MagLev Technoloy, Inc. The Environmental Mitigation & Mobility Initiative "EMMI" Logistics Solutions was invented by American MagLev Technology, Inc. suspend in the air, propel in the air and guide in the air vehicles, such as passenger trains or cargo-container carriers. Contact Info.: Japan and cargo-container tests are currently being conducted in the U.S., 4801 Burrow Trail, Powder Springs, GA 30127 www.american-maglev.com over existing rail tracks, freeways, highways or waterways.

**Fyrano 80,000 lbs. Drayage Truck** 

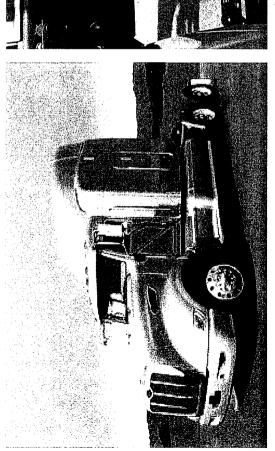


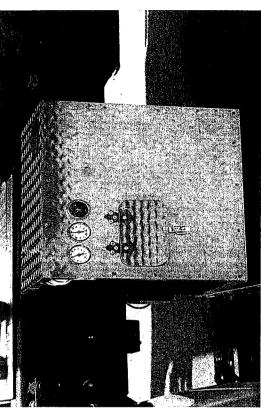
ZETT 130,000lbs. Terminal Tractor

# **Vision Motor Corp**

Segundo, California designs and manufactures advanced zero emission, hydrogen fuel cell hybrid electric drive, Class VIII heavyduty commercial drayage trucks. Vision provides cost effective, zero emission solutions to help short-haul freight carriers meet local, state and federal air emission standards and also provide a vehicle that delivers a lower cost of operation which has a direct impact on freight carriers profit margins. Vision Motor Corp has built the Tyrano a Class VIII 80,000lbs. Drayage Truck Vision Industries Corp a Florida corporation doing business as Vision Motor Corp (Vision) in California with headquarters in El and ZETT (Zero Emission Terminal Tractor) a Class VIII 130,000 lbs. Terminal Tractor (yard dog) for off-road port terminal, rail yard and intermodal facility operations. There is a Zero Emission Refuse Truck in its beginning design and development phase.

or natural gas powered trucks. Cost per mile and monthly operating cost are the key drivers and the savings are projected to competitive advantage over companies such as Balgon and Smith Electric who market battery-only heavy-duty trucks that offer be 30-40% per mile. Performance: Vision's hydrogen fuel cell/electric drive system has approximately 400 HP and 3,200 ft./lb. of available torque - almost double the pulling power of a conventional diesel truck. In addition, Vision maintains a strong top speeds of only 45 miles per hour compared with Vision's top speed of 65 miles per hour (electronically limited). A battery has an estimated travel range of 200- 400 miles between 10 minute refueling stops allowing eight hours of uninterrupted Life Cycle Cost Savings: Vision's heavy-duty trucks will be substantially less expensive to operate on a per mile basis than diesel truck has a limited driving range of 90 miles before interrupting service, requiring recharging of up to four hours. Vision's truck Contact Info.: Vision Motor Corp 120 Eucalyptus Drive, El Segundo, California 90245, www.motorcorp.com 310,454.5658 operations which is comparable to a diesel truck,





# Miracle Mile Solution, Inc.

road diesel fuel engine trucks, buses and all year models of off-road vehicles and equipment and costs about Miracle Mile Solution, Inc. is a southern California based company which has a patent pending application for its specifications, lowers life cycle maintenance costs and reduces toxic emissions that are produced. The VATSS has been successfully tested, is currently being test driven under various industry conditions and undergoing Contact info.: Miracle Mile Solution, Inc., 6260 Laurel Canyon Blvd., Ste. 202, North VATSS can be retrofitted on current 1985-2006 on-\$15,000. The advanced technology system creates an on-demand and on-board (no fuel storage or refueling) cleaner burning hydrogen-oxygen gas that dramatically increases the combustion efficiency of the diesel engine, increases miles-per-gallon 15%-20%, decreases fuel costs, reduces fuel consumption without altering OEM Vehicle Additive Technology Solution System (VATSS). 818.836.9452 Hollywood, California 91606 CARB certification.